1890 - History of Osaka Railways

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Introduction

1890 is a game about the railways of Kansai

1890 is a member of the 18XX genre of railway development games that is focused on the the development of railroads in the Keihanshin region of Japan. Players will operate the JR, Hankyu, Hanshin, Keihan, Kinki, Nankai, Sanyo, and Osaka Municpal Subway major railway companies, along with several smaller companies to achieve victory. The game simulates the period of time from the beginning of the railway era in Keihanshin to the year 2000, although some scenarios may end earlier.

1890 is a game about asset growth

1890 simulates stock investing and railway company management. At the end of the game, the player with the greatest net worth will be the winner. This is calculated as the combination of cash on hand and the value of shares held.

1890 is a game about railway company management

1890 has several types of railway companies, each with unique features. Private companies and late income companies pay a fixed income. Minor companies operate small trains. Public companies have a stock price which fluctuates depending on operating conditions, and can lead to greater profits. If you become president of a railway company, successful management will be to your own benefit.

1890 is a game about stock trading

Naturally, holding many shares of a well-performing company can lead to victory, but companies will not always perform well. As time goes on, trains become less plentiful and high-value trains can be traded cheaply between companies. Selling shares in a company that is (or expected to be) performing poorly can place a burden on the other shareholders. Beware of other players' operating strategies and stock speculation!

1890 is a multiplayer game

It is difficult to be profitable alone. Aside from the initial seating order, there are no random components in the game. Everything else is in the hands of the players.

1 Play of 1890

This game can be played with 2 to 7 people. The target age is 12 years and up, but 18 and older is recommended. There are a number of scenarios and variants.

1.1 Game Rounds

1890 is played over a series of game rounds. A game round consists of 1 stock round followed by 1 to 3 operating rounds. These rounds are tracked next to the stock market board. The number of game rounds is determined by the scenario.

1.2 Stock Rounds

During the stock round, each player can choose to sell shares, buy, sell then buy, or pass. Company shares are the unique means for a player to increase their net worth.

Until all private and minor companies are purchased, an initial stock round will be played, with different procedures than normal stock rounds. Once the initial stock round is over, the game will continue with the regular stock round.

1.3 Operating Rounds

During the operating round the president of each railway company operates the company. First, all private companies operate, followed by late private companies, minor companies, and finally public companies. Minor companies are operated in order according to their number, and public companies are operated in order of stock prices. The president of each company makes all decisions for that company during its turn.

When there are multiple operating rounds, move the round marker to the corresponding position of that operating round. Unless the game ends during the operating round, a new game turn will begin afterwards.

1.4 Game Phases

The game of 1890 progresses over 6 phases. The game phase is updated as new types of trains are purchased. When entering a new phase, some rules may change: the number of operating rounds, types of track tiles which may be laid, train limits, etc. vary over the course of the game.

1.5 Game End

The game ends when the bank is exhausted, any player goes bankrupt, or the last game turn is over.

1.6 Scenarios [A1-]

The 'Hanshin Railway' and 'Keihan Railway' scenarios are introductory scenarios which finish in less time. The full '1890' scenario finishes in 3-5 hours. Please decide the scenario and variant before playing.

2 Game Etiquette

Each player plays so that everyone can enjoy the game. Play will be smoothed by players planning their stock trades or company operations ahead of their turn.

2.1 Disclosure of player assets

Cash and share holdings of each player are public knowledge. Players should arrange their possessions such that they are easily seen by others, and must respond truthfully to questions. However, excessive inquiries will slow the game and should be avoided.

2.2 Company Charters

The president of each railway company places trains and private companies owned by the railway company on top of the company sheet so that everyone can see it. Company funds are also placed on the company sheet, but the amount does not need to be publicized.

2.3 Confusion of Assets

Players must take care to separate their assets from those of the companies that they manage.

2.4 Welcoming New 18XX Players

When a beginner plays with a skilled player, the skilled player should play such that beginner enjoys the game. In order to provide a welcoming experience, the new player should not be shut out, but nor should they be given excessive handholding. Being mindful of one another ensures that as many players as possible can enjoy playing 18XX.

3 Components

The 1890 is distributed as a kit. For kit production, please follow the procedure in the attached sheet.

3.1 Manual

This booklet, which contains 1890 rules

3.2 Map

The map of 1890 is centered around Osaka and is divided into hexes. A track tile may be placed in each hex, and each railway company will develop a line for operation.

- Green Areas Track tiles may not be placed in the Green area that is not divided into hexes. Placing track tiles such that they connect to this area is prohibited.
- Sea Areas The blue areas not divided into hexes are the sea. Track tiles can not be placed here. Placing track tiles such that they connect to this area is prohibited.
- Red Areas Red areas represent off-board destinations. Track tiles may not be laid here, but track may connect to the black arrows. These areas are treated the same as a city when running a train.
- Map Area An area divided into hexes where the track tiles can be placed.
- **Plains** White hexes are plains. Tiles that do not include cities can be placed and upgraded here.
- Large Cities Large city tiles may be placed and upgraded here. Placement and replacement of some track tiles can incur costs.

Small Cities Only yellow small city tiles can be placed.

Double Small Cities The Daito and Shijonowate hexes are the only double small cities hex on the map. A terrain cost must be paid to lay a track tile here.

Rivers Rivers are preprinted in blue on the map.

The river section is flanked by hexes. It is forbidden to place track tiles connecting to a river hexside. In addition, there are many rivers flowing through hexes that have a cost to lay track tiles.

Mountains Brown triangles indicate mountain hexes. Tiles without cities may be laid and upgraded, but a terrain cost must be paid for the initial tile lay.

Grey hexes No tiles may be laid or upgraded in grey hexes.

Yellow hexes Green track tile may be upgraded here

Yellow hexes with printed track Green tiles may be upgraded here. Because there are many special tiles, please be careful when replacing track tiles.

3.3 Share Certificates

Shares for private companies, late private companies, minor companies, and public companies.

3.4 Company Charters

This sheet is used when operating public and minor companies. These charters are managed by the president of the company. Company funds and trains, unused station tokens, and purchased private companies are placed on top of the charter.

3.5 Track Tiles

The map will be developed by laying and upgrading track tiles. There are yellow tiles, green tiles, and brown tiles, and there are special tiles that can only be placed in specific places. [Reference: Track tile table (end of volume)]

3.6 Money

Paper banknotes in denominations of 1円, 4円, 5円, 10円, 20円, 35円, 50円 are (24 notes each), 100円 (30 notes), and 500円 (12 notes). An additional 12 notes each of 500円 and 1000円, are available for use after the bank breaks. The number of available banknotes may be reduced depending on the scenario.

3.7 Priority Deal Card

This card indicates turn order in the stock round.

3.8 Train Cards

Shows a train

3.9 Station Tokens

Markers used to operate each public company. The trains that a company runs must pass through a city where its station tokens are located. A public company's unused stations tokens are placed on the company charter. Minor companies' order tokens are used as their station token.

3.10 Order Tokens

Used to determine turn order at the beginning of the game. After that, they will be used as station tokens for minor companies or the Kobe Shinkansen Railway late private company.

3.11 Stock price tokens

The square token containing the company name is used to indicate the stock price of the public company. The one with the front and back is used in the stock price table, and the one with only one side is used in the par price table.

3.12 Stock Market Board

The stock market board is used to manage game turns, rounds, and stock prices for public companies. Place each marker or token in its designated space and be careful not to shift the position inadvertently.

3.12.1 Game Turn Tracker

The current game turn is indicated by the game turn marker. Every time the game turn is changed, the position of the marker is updated. Depending on the variant, the game ends after a predefined number of turns.

3.12.2 Round Progress Marker

The current round is represented by a round marker. It will be updated each time a new stock round or operating round begins.

3.12.3 Open Market

Sold shares and discarded trains are placed in the open market.

3.12.4 Par Value Table

The par value table determines the price of a public company's unsold stock. This price does not change. When the president's share of a public company is purchased, the company's par value token is placed within the par value area.

3.12.5 Stock Price Table

The stock price table tracks the changing stock prices of public companies. The stock price of a public company is indicated by the stock price token on the stock price table, and moves up and down by buying and selling stocks, and moves left and right when dividends are paid or withheld. Which section a public company's stock is in has an important meaning in the game. When selling a public company stock certificate or purchasing a stock certificate from the open market, it is traded at this price. Also, the stock certificates held by the players at the end of the game will be converted to the prices on this stock table.

3.12.5.1 Red framed area Denotes the values which may be chosen as the initial stock price for newly started companies. This area has no other effect on play.

3.12.5.2 White Section No special limitations are in play for a company whose stock price is in this section.

3.12.5.3 Yellow Section Share certificates of companies whose stock price is in this area are not counted towards the certificate limit.

3.12.5.4 Brown Section Share certificates of companies whose stock price in this area are not counted toward the certificate limit. Also, you may own shares of companies with stock price in this area beyond the 60% limit.

3.12.5.5 Closing Section Companies whose stock price token has enters the closing section will be closed immediately [Ref. 7.4 company closing].

4 Game Preparation

You need 3m² or more space to play 1890. In order to be able to see the player's assets etc., it is recommended to play on a large table. The number of game components used will vary depending on the scenario.

4.1 Game Setup

Select the scenario to play and prepare the game as follows.

- Place the map and the stock market boards in the center of the table.
- Share certificates for public companies should be placed on the map, with the president's share at the top. Do the same with the late private company certificates.
- Place each train in the appropriate space on the map according to type.
- Elect a banker and arrange bank cash to be visible to all players
- Place track tiles, company charters, station tokens, par value tokens, and stock price tokens by the map and stock market boards. Place the game turn marker on the first space of the turn tracker. Place the round marker on the stock round space of the round tracker.
- Reserve space in front of each player to place a shares, company charter, money, etc.

• Arrange private and minor company certificates in the order indicated by the chosen scenario.

4.2 Bank

Choose one player to be the banker. The banker controls the inflow and outflow of bank funds. Bankers need the ability to be careful and manage the bank's money during play so that it does not get confused with the assets belonging to themselves or their railway companies. Players who are familiar with the game are generally the banker.

4.2.1 Start funds

Before starting the game, the banker prepares the necessary banknotes in the scenario to be played, and distributes the starting money to each player.

4.2.2 Bank cash entry and exit

Payments for dividends from each railway company will be made from the banks. Payments for new trains, trains in the open market, terrain costs, and stock certificate purchases will all be made to the bank.

4.3 Order

Each player draws an order token placed in a cup etc. one by one to determine the order. The banker sits in a convenient place to handle the money. Other players center their seats in a clockwise order, in ascending token number, centered on the banker. There are two number 4 tokens, but the darker one is used as the number 7 token. The player with the number 1 token receives the priority deal card.

5 Game phases

The game phases represent the progress of time and carry significant influence to the game. Each game phase changes represents a breakthrough in railway development history.

The game phase is updated as soon as a new train type is purchased. The purchase of the first 2+2 and 3+3-trains triggers the start of the second half of phase 1 and 2 respectively. This may or

may not have gameplay effects depending on the scenario.

1890 consists of six game phases. More than one phase may occur in one operating round. In addition, the game may end without arriving at the sixth phase. The following is an explanation of the changes in the rules that occur in each phase.

Phase 1 (first half, second half) The first half of phase 1 is from the beginning of the game until the purchase of the first 2+2-train. The second half of phase 1 is until the purchase of the first 3-train. During this time, the following restrictions apply:

- Only yellow track tiles can be placed.
- JR West Japan can place or upgrade two tiles.
- The train limit for minors companies, public companies and the JR is 2, 4 and 6 respectively.
- Public companies can not purchase private companies.
- 1 operating round per game turn
- Red offboard spaces are valued using the leftmost number.

Phase 2 (first half, second half) The first half of phase 2 is from the purchase of the first 3-train until the purchase of the first 3+3-train, and second half of phase 2 is until the purchase of the first 4-train. During this time, the following restrictions apply:

- Yellow and green track tiles can be placed.
- JR West Japan place or upgrade two tiles.
- The train limit for minors companies, public companies and the JR is 2, 4 and 6 respectively.
- Public companies can purchase private companies.
- Two operating rounds per game turn (starting on the game turn after the first 3-train is purchased).
- Red offboard spaces are valued using the leftmost number.

Phase 3 Phase 3 begins with the purchase of first 4-train until the purchase of the first 5-train. The following restrictions apply during this phase:

- Yellow and green track tiles can be placed.
- JR West Japan can place or upgrade two tiles.
- The train limit for minor companies, public companies, and JR is 1, 3, and 4 respectively.
- Public companies can purchase private companies.
- 2 operating rounds per game turn.
- All 2-trains are rusted.
- Red offboard spaces are valued using the leftmost number.

Phase 4 Phase 4 begins with the purchase of first 5-train until the purchase of the first 6-train. The following restrictions apply during this phase:

- Yellow, green and brown track tiles can be placed.
- JR West Japan can only place or upgrade 1 tile.
- The train limit for minor companies, public companies, and JR is 1, 2, and 3 respectively.
- All private companies are closed. (Exception: Hankai Tramway)
- From the next game turn, 3 operating rounds per game turn.
- All 2+2-trains are rusted.
- Red offboard spaces are valued using the middle number.

Phase 5 Phase 5 begins with the purchase of first 6-train until the purchase of the first D-train. The following restrictions apply during this phase:

- All track tiles can be placed.
- The train limit for minor companies, public companies, and JR is 1, 2, and 3 respectively.

- D-trains can be purchased
- All 3-trains and 3+3-trains are rusted.
- 3 operating rounds per game turn.
- Red offboard spaces are valued using the middle number.

Phase 6 Phase 6 begins with the purchase of the first D-train and continues to the end of the game. The following restrictions apply during this phase:

- All track tiles can be placed.
- The train limit for minor companies, public companies, and JR is 1, 2, and 3 respectively.
- All 4-trains are rusted.
- 3 operating rounds per game turn.
- Red offboard spaces are valued using the rightmost number.

6 Shares

6.1 Shares and certificates

The 1890 uses stock certificates to represent the ownership of each railway company.

A private company, minor company, or late private company's single certificate represents 100% ownership of that company. One share certificate of a public company represents either 10% or 20% of ownership, and each counts as one certificate towards the certificate limit.

When each railway company pays dividends during the operating round, the profit is distributed to each shareholder according to this percentage.

6.2 Certificate Limit

There is a limit to the number of certificates that each player can own (private companies, minor companies, late private companies, and public company). The certificate limit is specified for each scenario and depends on the number of players.

6.2.1 Exception to the certificate limit

If the stock price of a public company is in the yellow or brown section of the stock price table,

its stock certificates do not count towards the certificate limit.

6.3 Ownership Limit

Players can usually only own up to 60% of a public company's shares.

6.3.1 Exception to the ownership limit

If a stock company's stock price is in the brown section of the stock price table, players can hold shares of that company beyond the 60% ownership limit.

6.4 Exceeding certificate and ownership limits

If the stock token moves from the yellow or brown section during the operating round or at the end of the stock round, this may cause the certificate and/or ownership limits to be exceeded. In this case, affected players must sell shares in their next stock round turn to bring them in compliance with the limits.

6.5 Change of president

A change of president may occur when a player purchases a stock certificate or a president sells their stock certificates.

If a public company has a player who owns a percentage of shares of the company more than the current president, that player will become the new president and will have the operating authority and all responsibility for the railway company. When two or more players have the same number, the nearest player clockwise from the leaving president becomes the new president. The new president will exchange two of their regular stock certificates for the president's certificate, and receive the company charter and all its holdings (trains, station tokens, private companies, funds).

7 Starting and closing of companies

Private companies, minor companies, and late private companies are started at the time of purchase by a player. Public companies are established when a fixed number of shares are purchased from the initial offer.

7.1 Starting private companies and late private companies

Private companies and a late private companies are started at the moment their certificate is purchased. The purchasing player is the president.

7.2 Starting minor companies

Minor companies are started when their certificate is purchased. The player who has purchased the certificate will be the president. The minor company certificate is also used as its company charter. Once the company is started, the president receives capital from the bank and places it on the company charter and the corresponding the order number token is placed as its station token.

7.3 Starting public companies

A public company is started when 5 shares (50%) are purchased from the initial offer. Exception: In the 1890 scenario, Kinki Nippon Railways is started when the owner of the Osaka Electric Railway minor company announces the start of Kinki Nippon Railways.

7.3.1 Purchasing the president certificate of a public company

Usually, the first stock certificate purchased from a public company is the president's stock certificate. The player who buys the president's stock certificate determines the par price of the public company from the following options: 65円, 70円, 75円, 80円, 90円, or 100円. They place the par token in the par price table, and place the stock price token in the red-outlined are in the stock price table. If other companies' tokens occupy that space, the new company's token is placed at the bottom of the stack. The price to purchase the president's certificate is two times the par price.

7.3.2 Preparation for starting a public company

The president of the started public company receives the company charter and its station tokens,

placing them on the spaces on the company charter marked with prices 40円 and 100円. As capital, the company receives ten times the par price from the bank. For the remainder of the game, further sale and purchase of the company's shares will not affect the amount of funds in its treaury. [Exception: Kinki, section C.8.4]

7.4 Company closure

Private companies will be closed at the beginning of Phase 4 (exceptions: Hankai Tramway (see scenarios C8.1, D8.1): Osaka Municipal Electric Railway).

A public company closes when its stock price token enters the closed space on the stock price table. The closed company's stock certificates are discarded. The treasury of the public company are returned to the bank, and its trains are discarded to the open market. All station tokens placed on the map will also be removed, vacating their city spaces and allowing other railway companies to place station tokens there. Closed public companies are no longer available to start for the remainder of the game.

8 Stock round

In the stock round, players buy and sell railway company shares, which form the source of players' income during the game. While private and minor companies remain unsold, a special initial stock round takes place instead of a regular stock round.

As the presidency of public companies is decided by which player has the largest share holdings, buying and selling of shares is important.

8.1 Priority Deal Card

Beginning with the player holding the priority deal card, players perform turn actions in clockwise order.

If the player holding the priority deal card performs an action instead of passing, they will pass the card to the next player in clockwise order. This is true for both regular stock rounds and initial stock rounds.

8.2 Progress of the stock round

The stock round starts from the player with the priority deal card, and proceeds by each player taking turns in clockwise order. On their turn, a player may perform one of the following four actions:

- Sell shares
- Buy 1 stock certificate.
- Sell and buy shares (in either order)
- Pass

A player who takes an action other than passing will give the priority deal card to the next player in turn order.

The stock round will continue to be played until all players pass in succession, and may go around the table several times. Players who pass may take future actions in the stock round, provided the stock round has not ended before the turn returns to them.

8.3 Selling shares

Only shares of public companies may be sold. During another player's turn, it is possible to sell private companies if the other player requests to purchase them.

8.3.1 Fall in stock price due to the sale of shares

When a player sells a stock certificate, they place the stock certificate in the open market and receive the current value according to the stock price table. The railway company's stock price token is then moved down one row for every 10% of the shares sold. When the stock price token is on the bottom row, the stock price does not change, regardless of how many shares are sold.

8.3.2 Restrictions on share sales

No more than 50% of the shares of any railway company may be in the open market. Stock sales that would exceed this limit are not allowed.

The president's certificate can not be sold unless another player has at least two shares of the company.

During the stock round of the first game turn, all players are prohibited from selling stock.

8.4 Buying shares

Players can purchase one stock certificate from the initial offer, or one stock certificate from the open market. Players may also buy one private company from another player. Stock certificates from the initial offer will be purchased in order, beginning with the president's certificate, at the par price decided by the first player to buy shares of that company. Stock certificates in the open market are purchased at the price currently indicated on the stock price table. The president's certificate and four regular certificates of Kinki Nippon Railway (see 1890 scenario) appear as minor companies convert. The president's share of Osaka Municipal Subway is given to the purchaser of the Osaka Municipal Electrica Railway private company.

8.4.1 Restrictions on share purchases

Players may not buy shares of a company which they have sold previously in the same stock round. In addition a player may not purchase shares which would cause them to exceed certificate or ownership limits. (Exception: subsubsection 6.2.1, subsubsection 6.3.1)

During the first game turn and the initial stock round, late private companies may not be purchased.

The purchase of certificates from other players which are not private companies is prohibited (see: 10.9)

8.5 Sell and Buy Shares

Players may choose whether to sell or buy first, but all sales must be done at once. If a company's stock price is higher than its par price, it is possible to buy one certificate from the initial offer and immediately sell it for a profit.

8.6 End of stock round

The stock round ends when all players pass in succession. If no player performed actions, the priority deal card does not move. When the stock round is over, move the round marker from stock round to operating round 1.

8.6.1 Price adjustment for sold out companies

At the end of the stock round, stock price tokens for public companies whose shares are all owned by players move up one row. If the stock price token is already on the top row, it does not move.

9 Initial stock round

An initial stock round will be played until all private and minor companies appearing in the chosen scenario have been purchased by players.

9.1 Progress of the Initial Stock Round

Each private and minor company is arranged for sale in the order shown in the scenario. The initial stock round is resolved clockwise from the player with the priority deal card. Each player performs one of the following in his turn, and passes the priority deal card to the next player in clockwise order.

- Buy a purchaseable company.
- Bid for one of the auctionable companies.
- Pass.

9.1.1 Available Railway Companies and Auctioned Companies

The only railway companies that players can buy are the companies at the very beginning of the list of companies. All the companies (Private and Minor) listed after that are auctionable railway companies.

9.1.2 Purchase Available Railway Company

The active player may buy the purchaseable company at face value, then passes the priority deal card to the next player.

If the next company in line has no bids on it, it will become the new purchaseable company. Otherwise, if one or more players have bid on it, the auction will be carried out.

9.1.3 Participate in the auction of a competitive railway company

The active player may place a bid on one of the auctionable railway companies and then pass the priority deal card to the next player. Over the course of multiple turns, a player may have bids on several railway companies, if they have enough money.

9.1.3.1 How to bid The initial bid on a railway company must be greater than its face value by 5円 or more. Subsequent bids on that company must exceed the highest bid by 5円 or more. The player who makes a bid must set aside money equal to the value of the bid. This money is unavailable for other use until the company they bid on is sold. It is possible to increase the value of a previously placed bid by adding more money to these reserved funds, but there is no requirement to do so. After bidding, pass the priority deal card to the next player.

9.1.4 Auction

When a purchaseable railway company is bought, and the next company in line has bids on it, an auction will be resolved for that company. Only players who have placed bids on the company will participate in the auction. If only one player has bid, the company will be sold to them at their bid value. If multiple players have bids, then the auction will commence clockwise from the player with the highest bid.

To remain in the auction, players must increase their bid to exceed the current high bid by 5 pm or more. Otherwise, they pass and are removed from the auction. When all but one player have passed, the remaining player purchases the railway company for their bid value.

After resolving the auction, if the next company in line also has bids on it, resolve a new auction for that company. Otherwise, the next company becomes the new purchaseable company and the initial stock round continues.

Regardless of how many companies were auctioned and to whom, the priority deal card is passed to the player clockwise from the player who made the purchase that triggered the auction(s).

9.2 End of the Initial Stock Round

The initial stock round ends when all private companies and minor companies have been purchased by players. After the initial stock round ends, a regular stock round is played. During the initial stock round, late private company and public company certificates can not be bought. In addition, late private companies can not be bought on the first game turn.

9.3 Initial stock round across multiple game turns

The initial stock round may be played for two or more game turns. If all players pass consecutively before all the private and minor companies are sold, the stock round ends and an operating round is played. Private and minor companies which have been sold will operate. The game turn is incremented and the stock round of the next game turn will continue from the previous intital stock round. Bids from the previous game turn remain on the companies and their corresponding funds must be kept in reserve.

9.3.1 Arima Electric Railway purchase price decrease

Each time one game turn ends without the Arima Electric Railway being sold, its purchase price drops 5 [7]. If this makes the purchase price 0 [7], the player with the priority deal card must buy it in the next initial stock round. This is considered as the player having purchased Arima and any consequences that would entail from such a purchase are carried out (e.g. passing priority deal, triggering auctions). Arima Railway is the only railway company whose purchase price falls in this manner, and this does not affect its face value.

9.4 Determination of stock price (1890 scenario)

The player who purchases the Osaka Municpal Electric Railway private company immediately sets the par price for the Osaka Municipal Subway public company. The player who purchases the Osaka Electric Railroad minor company immediately sets the par price for the Kinki Nippon Railways public company. (C8.1, C8.2, D8.1)

10 Operating Round

In the operating round, all railway companies that can operate will do so in turn order. There will be 1 to 3 operating rounds per game turn depending on the game phase.

10.1 Overview

The operation round will proceed in the following steps.

- 1. Operate private companies and late private companies.
- 2. Operate minor companies in numeric order (1-5).
- Operate public companies in order of descending stock price.

10.2 Private companies and late private companies

All private companies and late private companies operate simultaneously. The dividend amount printed on their certificate is paid to their owner.

10.3 Minor companies and public companies

First, minor companies operate in numeric order. Next, public companies operate in the order of descending stock price. If two public companies have the same stock price, the company whose stock price token is further right will operate first. If the two companies' stock price tokens are in the same space, the company at the top of the stack will operate first.

A minor or public company's operating round turn consists of the following steps:

- 1. Lay and upgrade track tiles. (Optional)
- 2. Place a new station token. (Optional, public company only)
- 3. Run trains for revenue.
- 4. Public companies pay dividends or withhold. Minor companies will pay 50% dividends.
- 5. Move the stock price token in the stock price table. (Public company only)
- 6. Buy trains. (Optional)

The above actions must be performed in the given order, although not all actions must be performed. Additionally, public companies may purchase private companies from players at any point during their operating round turn, if permitted by the current game phase.

10.3.1 Track tiles

The railway company can construct the track by placing or upgrading the track tiles on the map. This action will connect the city to the train so that it can travel and increase the value of the city through urban development. Track tiles are placed to fit into any hex on the map. Track tiles once placed become part of the map and can only be moved when upgraded by other track tiles. The placement and upgrading of the track tiles is optional. Also, companies do not need to use the track tiles they placed when operating their trains.

10.3.1.1 Laying and upgrading track tiles

Each railway company can place or upgrade one track tile, except for JR, which may place or upgrade up to two in phases 1 to 3. Tiles can be placed or upgraded in hexes that are connected to one of the company's station tokens, regardless of distance.

Yellow tiles are laid on empty map hexes, and are then upgraded to green and brown. Brown track tiles may not be laid directly on the map, and yellow tiles may not be upgraded directly to brown.

Tile upgrades are not permitted until phase 2.

10.3.1.2 Restrictions on track tile laying

Track tiles may not be laid such that they connect to non-hex locations, Osaka Bay, non-tracked edges of red offboard hexes, heavy black borders, and hexes not included in the current scenario.

Track tiles may also not be placed or upgraded in grey hexes (Tanigami, Uji, and northeast of Nara).

Certain hexes are blocked by private company track. No track tiles may be laid in these hexes until either: the corresponding private company is bought by a public company, closes, or otherwise loses placement restrictions. 10.3.1.3 Laying track tiles Yellow track tiles are laid on empty hexes without yellow or black borders on the map. Only yellow track tiles with large cities may be placed on empty hexes with large cities. Only yellow track tiles with the same number of small cities can be placed on empty hexes with a small cities. Track tiles placed in a small city can not be further upgraded for the rest of the game.

10.3.1.4 Upgrading track tiles Track tile may be upgraded in any direction that preserves all track and connections on the previous tile, but upgrades which would violate track lay restrictions (paragraph 10.3.1.2) are prohibited. The previous track tile is removed from the map and is available for use elsewhere.

When upgrading a track tile, existing station tokens must be in the same position on the new track tile.

10.3.1.5 Costs to lay or upgrade track tiles Certain hexes on the map are printed with a terrain cost that must be paid in order to lay or upgrade a track tile there. This cost must be paid from the treasury of the operating railway company, and the president can not contribute personal funds in the case of a shortfall.

10.3.1.6 Special track tiles Large city hexes with yellow track tiles printed on the map (Osaka Kita, Osaka Higashi, Osaka Nishi, Osaka Minami, Kobe, Kyoto, Nara, Hirakata, Kashiwara) are treated as pre-laid yellow tiles.

Yellow-framed hexes on the map (Ibaraki, Moriguchi, Sakai) can be upgraded with the green track tiles marked "OO" (#210, #211). These are further upgraded with the brown "OO" track tile (#217), combines the two separate large cities into a single large city.

Amagasaki, Kobe, Kyoto, Osaka Higashi, Osaka Kita, and Osaka Minami may only be upgraded with the green and brown track tiles marked with their name.

Normal yellow and green track tiles are used for Nishinomiya, but the only brown tile which may be upgraded there is the one marked with "Nishinomiya" (#465).

Osaka Nishi upgrades to the green #12 track tile,

and then to the brown tile marked "Osaka Nishi" (#839).

10.4 Station token placement

Station tokens represent locations and facilities that a railway company uses to operate its trains. Once station tokens are placed, they can not be removed until the end of the game, or the company closes. (Exceptions: Kinki Nippon Railways, Kobe Electric Railway).

10.4.1 Home station token placement

During a railway company's first operating round turn of the game, a free station token is placed in its home location(s), indicated by the company's logo printed in large city spaces on the map. (Exception: Kinki Nippon Railways C.8.4)

10.4.2 Normal station token placement

Each public company can place one station during its turn. The cost for each token is listed on the company charter: 40円 for the first token, and 100円 for each subsequent token. This cost is paid from the treasury of the company placing the token. The number of station tokens a company may own is limited by the number of spaces on the charter.

On a company's first operating turn, it may place a normal station token in addition to its home token(s).

10.4.3 Requirements for placing normal station tokens

Station tokens are placed in empty large city locations. The city must be connected to one of the company's existing tokens on the map such that a train of infinite length could connect the two locations. Station tokens may not be stacked, and a company may only have one of its station tokens on any single track tile.

Home station locations for unstarted companies are reserved and no station tokens may be placed there. If a track tile upgrade adds additional large city spaces, then other public companies may place their tokens in the additional space.

10.5 Operating trains

The active company determines the routes that its trains will run. The revenue generated is then distributed to the company's shareholders and/or its treasury.

10.5.1 Right to decide train routes

The president of the operating company decides the routes that will be run by company's trains. The company's other shareholders can describe better routes to the president, but the president is not obligated to follow their suggestions.

10.5.2 Route definition

Train routes must follow the track on the map according to the following rules. If a railway company owns multiple trains, it is possible for it to operate multiple routes.

- The train's route must include at least one city containing the company's station token and one other city (large city, small city, red off-board city).
- The number of cities that the train can visit is the same as the train number (subsection 12.1 types of trains)
- Trains can only travel in the direction of a straight or curved track. The track lines crossing each other on a tile are overpasses, so it is not possible to switch directions at such points. Backtracking is not permitted.
- If a route contains a red off-board location, it must be the start or end of the route.
- The same city can not be used twice on a single train's route. This includes red off-board cities. However, different cities on one track tile can be used.
- Track may not be re-used in a single train route, but a track tile can be revisited if doing so uses only yet unused track.
- A route may include cities where all spaces are occupied by station tokens, but the route may pass through such cities only if one of the tokens belongs to the operating company. (Exception: Kobe Rapid Transit Railway C.8.2)
- Count all cities on the train route.

• If operating multiple trains, a single city may be visited by more than one train as long as different track is used.

10.5.3 Revenue from Operations

The sum of the values of the cities (large cities, small cities, and red off-board cities) on a train's route is the revenue for that train. Total the revenue from each train to obtain the revenue for the current operating round. Companies with no trains earn no revenue.

10.6 Dividends

A public company that operated trains may either pay the revenue as dividends or keep it in its treasury. Minor companies that operated trains must pay dividends. Companies that did not operate trains do not pay dividends.

10.6.1 Minor company dividends

Minor companies can only pay dividends. Half of the revenue is paid to the president and the other half is added to the company treasury.

10.6.2 Public company dividends

If the president of a public company chooses to pay a dividend, the revenue generated by the operating trains will be distributed among shareholders. The company's shareholders receive 10% of the revenue for each share certificate (20% for the president's certificates). Shares in the open market pay to the company treasury. Shares in the initial offer pay their dividends to the bank. (Exception: JR paragraph A.8.4)

10.6.3 No distribution of public companies

If the president of a public company elects not to give a dividend, all the revenue generated by operating trains will be added to the company's funds.

10.6.4 Moving stock price tokens

The stock price of a public company moves depending on whether it paid dividends or kept the revenue for its treasury. If a dividend was paid, move the stock price token to the right and flip it over. If it did not pay a dividend, move the stock price token to the left and flip it over.

10.7 Purchase trains

Minor companies and public companies can buy trains as long as the train limit is not exceeded. Check for phase changes in between each train purchased (subsection 12.4).

10.8 End of operating round

The operation round ends when all the operational companies have been operated. Flip over all stock price tokens. If any started companies are in a stack, their tokens will always be on the top.

Move the round marker of the round progress table to the next space; if the current run round is the last operating round, move the round marker to the stock round space and advance the game turn marker by one.

10.9 Purchase Private Companies

During the phases 2 and 3, a public company can purchase a private company (but not late private companies) from any player during its own operating round turn. The purchase price must be at least half and at most double the private company's face value. For example, the 20円 Arima Railway is sold between 10円 and 40円.

Payments are made directly from the treasury of the public company to the player who held the private company. Some private companies give benefits to the public company that owns it. This benefit can be used immediately after purchasing a private company. Private companies that are owned by public companies pay their dividend directly to the owning company's treasury.

Private companies, late private companies, and minor companies can not purchase private companies.

11 Railway companies

In 1890, there are 6 private companies, 5 minor companies, 4 late private companies, and 8 public companies. By operating these companies, players can earn a profit. Depending on the scenario,

some companies may not be used or their rules may change.

11.1 Private companies

Private companies are small privately-owned companies that are purchased by players in the initial stock round. Each private company owned by the player counts as 1 certificate towards the certificate limit. All private companies will pay dividends printed on their certificate at the beginning of each turn each operating round. The player or public company that owns the private company receives the dividend.

11.1.1 Private company restrictions on track tile placement

Certain hexes on the map are marked with private company tracks. While these private companies are owned by players, any placement of track tiles on these hexes is prohibited. This restriction is lifted when the private company is bought by a public company or the private company closes.

11.1.2 Purchase of private companies by public companies

Beginning in phase 2, public companies can buy private companies any time during their own operating turn. The purchase price is any amount between half and twice the private company's face value agreed upon by the seller and buyer. A railway company that purchases a private company may receive certain benefits.

11.1.3 Purchase of private companies by players

During their stock round turn, players can buy private companies from other players at any agreed-upon price.

11.1.4 Closure of private companies

Private companies close at the beginning of phase 4. All benefits from a private company cease when it is closed.

11.2 Late private company

Late private companies are almost always treated the same as private companies. From the second game turn, all players will be able to purchase late private companies during their turn in a regular stock round (not an initial stock round). Each late private company owned by the player counts as one certificate toward the certificate limit. Late private companies may not be sold during the game. At the beginning of each operating round, the player which owns the late private company receives the dividend printed on its certificate. Late private companies do not close during the game.

11.3 Minor companies

Minor companies are specialized private companies that operate in the same way as public companies. Minor companies are purchased by players in the initial stock round. Minor companies that have been purchased by players can not be sold during the game. The starting capital of a minor company fixed and will not change regardless of the purchase price. Minor companies may not be bought or sold between public companies or players.

11.3.1 Operation of a minor company

Minor companies operate after private companies and late private companies. The number shown in the small company's charter will be its operating order, and the token corresponding to the number will be used as the station token for that small company.

A minor company is a larger company than a private company or a late private company, and operates like a public company until a merger with Kinki Nippon Railways or a transformation to a late private company occurs.

Minor companies must pay dividends whenever they operate trains. A minor company pays half of its earnings to the president of that company and the rest to the company treasury. The stock price of a minor company does not change from the par value.

11.4 Public companies

There are eight public companies in 1890: Osaka Subway, Hankyu, Hanshin, Keihan, Kinki, Nankai, Sanyo, and JR. They are major railway companies that generate the greatest profits in this game. Public companies are owned by multiple players by purchasing stock certificates in a

stock round. The president of a public company is the player with the president's stock certificate and they operate the public company during the operating round. The president may change through the buying and selling of stock certificates.

Some companies listed in the scenario may be started or operated in special procedures.

11.4.1 Operation of public companies

The president of a public company takes all of the company's actions during the operating round: laying or upgrading track tiles, placing station tokens, operating trains for revenue, deciding whether to pay dividends or withold, purchasing trains, etc.

11.4.2 Starting of public company

If 50% of a company's shares is held among all players and the open market, then the public company is started. (Exception: D8.4 Kinki Nippon Railways)

Once started, the public company will continue to operate until the end of the game, unless it is closed. Once closed, the public company will not appear again during the game.

12 Trains

Trains can only be owned by minor companies and public companies. Trains make money by traveling between cities during the operating round. Trains owned by the company can not be voluntarily discarded.

12.1 Types of trains

The type of train represents the number of cities (large cities, small cities, red areas outside the map) where the train can run. For example, 4-trains can run to four cities. As an exception, 2+2-trains can run to 2 large cities and 2 small cities, and 3+3-trains can run to 3 large cities and 3 small cities. D-trains can run to an unlimited number of cities.

The number of trains available is as shown in the table below, and the more cities a train can run to, the more expensive it becomes. The number of type of trains that are available is determined by the scenario.

Train	Count	Price	Era
2	9	80円	1910
2+2	3	120円	1920
3	5	180円	1930
3+3	2	230円	1940
4	4	300円	1950
5	3	450円	1960
6	2	630円	1970
D	6	1100円(800)	1980

12.2 Train limit

The maximum number of trains that a railway company can own is fixed for each game phase. A railway company can not own or purchase a train beyond the train limit.

If the train limit is reduced when the game phase changes through the purchase of a train, the presidents of each company must immediately discard any trains the company holds exceeding the limit. Discarded trains are placed in the open market and are available for purchase.

12.3 Train ownership obligation

Companies are obligated to own a train if they can trace a valid route from any of their station tokens. If such a company does not own a train at the end of its turn, it must buy one. If the company treasury is insufficient to do so, a forced-purchase occurs.

A company is exempt from owning a train if it has no route, or if there are no trains available for purchase from the bank or open market. However, in these cases, the railway company can not pay dividends, so the stock price will continue to fall each operating round.

12.4 Purchasing trains

All trains are initially purchased from the bank. Trains purchased from the bank will be sold in order. For example, 2+2-trains cannot be bought until all 2-trains are purchased from the bank, and 5-trains cannot be bought until all 4-trains are purchased from the bank. However, once the first 6-train is purchased, D-trains may be bought. The purchase of a new train type will trigger a change of game phase. The cost to purchase a train is paid from the treasury of the

railway company that purchases the train. (Exception: forced purchase of trains 12.5)

12.4.1 Purchase by the trade-in of the train

The price of the train is listed on the train card. D-trains can be purchased at 1,100円 or at 800円 by trading in a 4-, 5- or 6- train. Since 4-trains will be rusted when the first D-train is purchased, it is only the first D-train may be bought with the trade-in of a 4-train. Traded-in trains are placed in the open market.

12.4.2 Purchasing trains from the market and other companies

Trains can be purchased from other railway companies and the open market. A company may buy a train from a different company at any price agreed upon by the two presidents, that is at least 1円. Trains in the open market are bought at face value.

12.5 Forced purchase of trains

If a company is obligated to own a train, and does not have enough money in its treasury to buy one from the bank or open market, the president of the company must use their own funds to make up the shortfall. The following rules apply for a forced purchase:

- Only one train may be bought.
- The cheapest train from the open market or bank must be bought. Buying a train from another company is not allowed.
- The company's entire treasury is spent, and the remaining amount is paid by the president.

If the president doesn't have enough money to pay for the shortfall, they must sell stock to raise the necessary funds. (Refer to the section on forced sale of share certificates).

12.6 Train rusting

2-, 2+2-, 3-, 3+3-, and 4-trains are rusted at the beginning of game phase 3, 4, 5, and 6 respectively. Rusted trains are immediately and unconditionally removed from the game (section 5).

13 End of the game

The game may end in three ways. A player goes bankrupt, the bank runs out of money, the end of the final game turn (according to the scenario).

When the game is over, the player with the greatest assets will be the winner. It is possible for a player who has gone bankrupt to win. Count the following towards personal assets:

- On-hand cash held by players
- Shares valued by their price on the stock price table
- The face value of private companies, minor companies, and late private companies

13.1 End processing of the game

In order to make the game termination process more error-free, we suggest the following procedure:

- 1. Return all cash remaining in each company's treasury to the bank.
- 2. Exchange all stock certificates for cash. Make the exchange for all players at the same time, starting with the company with the lowest stock price.
- 3. Exchange private companies, minor companies, and late private companies for cash at face value
- 4. Compare all players' cash on hand.

13.2 Player Bankruptcy

If a player can not provide the funds needed to make a payment, that player will go bankrupt. No player or company can do anything from that moment on.

A player may not voluntarily declare bankruptcy.

If a minor company or a public company is obliged to purchase trains, and company treasury plus president's cash after all possible share sales is insufficient to buy a train, the president player is bankrupt. All money raised is seized by the bank and the remaining debt is waived. The game immediately ends.

13.3 Breaking the bank

The bank breaks when there is insufficient money to pay players or companies, e.g. for operating revenue or share sales. The game will end at the end of the current game turn.

Use whatever means necessary (e.g. additional banknotes/poker chips, spreadsheet) to track additional cash flows until the end of the game.

13.4 Final game turn

When the last game turn indicated by the scenario is finished, the game is over.

14 Forced sale of shares

There are two situations in which the player is forced to sell stock certificates.

- They hold shares beyond the certificate and/or ownership limits. In their next stock round turn, they must sell shares to comply with the limits.
- If they are the president of a minor or public company which is obliged to buy a train, and their cash on hand combined with the company treasury is insufficient to do so. They must sell shares to raise the necessary cash. If all possible sales have been made and they still cannot afford a train, the player is bankrupt and the game ends immediately.

The following rules apply to all forced-sales of stock certificates.

- Shares cannot be sold that would cause a change of presidency of the company which caused the forced sale. However, sales can be made which would cause a change of presidency in other companies.
- The president decides which company's stock certificates, in what order, and how many to sell.
- The public company may be closed by the sale of stock certificates. In this case, all cash made here will be collected by the bank.
- All shares to be sold must be sold together.

- Open market limits, certificate limits, and ownership limits all apply.
- The president can only sell shares for the amount necessary to purchase the train.

Even if the public company that caused the

forced train purchase is closed due to a forced sale, all cash prepared for payment of the train will be seized by the bank. At this time, if the train is purchased, the train will be put in the open market.

I Scenarios

Several scenarios are available for selection depending on desired play time and/or player skill.

A Hanshin Railways: 2 to 3 hours, 2 to 4 players

B Keihanshin Railways: 2 to 3 hours

C 1890: 3 to 5 hours

D 1890 Simplified: 3 to 5 hours

A Hanshin Railways

This scenario was designed to play as an 18XX introductory game. It is designed to finish quickly with a small number of players, and almost the same game phase structure. Experienced players can finish a game in 2 to 3 hours.

Experience the battle of railways in Hanshin between Hanshin Railway, Hankyu Railway, and JR.

In this scenario, 6-trains and D-trains are very unlikely to appear. Once you get used to it, try playing the next 'Keihanshin Railways Scenario'.

A.1 Number of players

2 to 4 (2 to 3 recommended)

The two-player game is an austere experience whereas the three-player game is more enjoyable. The four-player game is an unending experience.

A.2 Map

The entire map west of the Yodo River (towards Kobe), including Osaka Kita and Kyoto is used. As per the normal rules, track tiles may not be laid pointing towards the Yodo River.

A.3 Track tiles

All usable (except for special tiles cities not included in the scenario).

A.4 Trains

Type	2	2+2	3	3+3	4	5	6	D
Count	5	0	4	0	3	2	1	$\overline{5}$

A.5 Money

The bank size is 6,000円. Set aside all 500円 and 1000円 banknotes for use after the bank breaks. Divide 1,500円 evenly among players as starting capital.

Players	2	3	4
Start Money	750	500	375

A.6 Phases

Phase 1 to phase 6 are played as normal. However, the concept of the first half and second half of phases 1 and 2 is not relevant.

A.7 Certificate Limits

Use the following certificate limits according to the number of players:

Players	2	3	4
Certificates	16	12	10

A.8 Companies

Due to the limited scope of the map, fewer companies are used. There are 5 private companies, 1 minor company and 4 public companies. Late private companies are not used, except in the case where Kobe Electric Railway converts to a late private company. Also, at the start of the game, the initial stock round will start in the following company order. Keishin Railway and Osaka Municipal Electric Railway use the par value and the dividend amount as shown below.

A.8.1 Private Companies

In this scenario, every private company can be purchased by a public company. Until the private company is purchased by a public company or closed, the hexes with tracks for these private companies can not have track tiles laid on them. The rules and benefits for each private company are as follows:

Arima Railway 20円 / 5円

Once purchased by a public company, you can place an additional tile on Arima in addition to the regular track tile placement. The track tile does not need to be connected. This power disappears when Arima Railway closes.

	Company	Par/Revenue (円)	Type	Modified?
A	Arima Railway	20/5	Private	
В	Kobe Tramway	40/10	Private	
\mathbf{C}	Keishin Railway	60/15	Private	X
D	Hanshin Tramway	110/20	Private	
\mathbf{E}	Osaka Municipal Electric Tramway	120/30	Private	X
\mathbf{F}	Kobe Electric Railway	100/-	Minor	

Kobe City Tramway 40円 / 10円

There are no special features.

Keishin Railway 60円 / 15円

There are no special features.

Hanshin National Highway Orbit 110円 20円

Comes with one share of Hanshin Electric Railway.

A.8.2 Late private companies

Late private companies are not used except for the case of exchanging the Kobe Electric Railway minor company for a late private company.

A.8.3 Minor Companies

Kobe Electric Railway

Home: Tanigami Par Value: 100円 Starting Capital: 200円

At any point during it's operating round turn, Kobe Electric Railway may convert to a late private company. After converting, station tokens are remvoed and all assets are returned to the bank. Although the Kobe Electric Railway late private company certificate does not count toward the certificate limit, its face value is 0 . From this point onwards, any public company may place a station token in the city previously occupied by Kobe Electric Railway's token (Tanigami).

A.8.4 Public companies

It is said that the development of the game is driven by public companies. In order to ease play, no special rules are used for this scenario.

Hanshin (Hanshin Electric Railway)

Home: Nishitomi Stations: 3

The company is started when 4 shares are purchased because 1 share of Hanshin stock comes with the Hanshin Tramway private company.

The Hanshin stock attached to the Hanshin Tramway can not be sold until the president stock of Hanshin is purchased.

Hankyu (Hankyu Railways) Home: Toyonaka Stations: 4

No special rules.

JR (Japan Railways) Homes: Osaka Kita, Kyoto, Nara, Kobe Stations: 6

JR is treated as a regular public company except for the following rules:

- The par price must be 100円.
- JR has a higher train limit than other public companies.

Phase	Limit
1	6
2-3	4
4-6	3

- JR can only distribute operating revenue as half dividends. Half of the revenue (rounded up to the nearest 10円) is paid directly to the company treasury, the remaining half is distributed among shareholders. Revenue can also be withheld as normal.
- In game phases 1 to 3, JR may place or upgrade two track tiles in two different hexes. Performing two tile actions on the same hex is not allowed.

Sanyo (Sanyo Electric Railway) Home:

Akashi Stations: 2

No special rules.

A.9 End of the game

The game will end if any of the following conditions are met:

- 1. The bank breaks
- 2. Player bankruptcy
- 3. After 10 game turns.

A.10 Variants

Please try to provide some variants. Also, try using the 1890 scenario variant if you are used to it.

A.10.1 Specialization of public companies

Incorporate and play by the special rules of each railway company from the 1890 scenario.

A.10.2 Start capital

Reduce the amount of money held by the first player. The amount of money should be decided between players.

A.10.3 JR's rule change

Play without special rules for JR (extra track actions, half dividends, fixed par price).

A.10.4 Number of game turns

The game ends after 8 game turns instead of 10.

B Keihanshin Railways

This scenario is an extension to the Hanshin Railways scenarios. Frequently, the 6-trains will not come out.

B.1 Number of players

2 to 4 players

B.2 Map

The entire map west of the Yodo River, and also the hexes directly adjacent to the east (right) of the Yodo River. Osaka city includes Osaka Kita and Osaka Higashi. The hex to the east of Kyoto is also used.

B.3 Track tiles

All usable (except for unused special locations).

B.4 Trains

Type	2	2+2	3	3+3	4	5	6	D
Count	5	0	4	0	3	2	1	6

B.5 Money

The bank size is 6,000円. Set aside all 500円 and 1000円 for use after the bank breaks.

Divide 1,500円 evenly among players as starting capital.

Players	2	3	4
Start Money	750	500	375

B.6 Phases

Phase 1 to phase 6 are played as normal. However, the concept of the first half and second half of phases 1 and 2 is not relevant.

B.7 Certificate Limit

Use the following certificate limits according to the number of players:

Players	2	3	4
Certificates	16	12	10

B.8 Companies

Due to the limited scope of the map, fewer companies are used. There are 5 private companies, 1 minor company and 5 public companies. Late

private companies are not used, except in the case where Kobe Electric Railway converts to a late private company. Also, at the start of the game, the initial stock round will start in the following company order. Osaka Municipal Electric Railway uses the modified par value and the dividend amount as shown below.

	Company	Par/Revenue (円)	Type	Modified?
A	Arima Rail-	20/5	Private	
	way			
В	Kobe	40/10	Private	
	Tramway			
$^{\rm C}$	Hanshin	110/20	Private	
	Tramway			
D	Osaka Mu-	120/30	Private	X
	nicipal			
	Electric			
	Tramway			
\mathbf{E}	Keishin Rail-	160/25	Private	
	way			
\mathbf{F}	Kobe Elec-	100/-	Minor	
	tric Railway			

B.9 Private Companies

Same as the Hanshin Railways scenario. However, the following changes will be made to Keishin Railway.

Keishin Railway 160円/25円

Comes with one regular share of Keihan Electric Railway.

B.10 Minor companies

Same as the Hanshin Railways scenario

B.11 Late private companies

Same as the Hanshin Railways scenario

B.12 Public companies

Same as Hanshin Railways scenario, with the addition of Keihan Electric Railway.

Keihan (Keihan Electric Railway)

Homee: Hirakata Stations: 3

The company will be started if 4 shares are purchased from the initial offer, since the Keishin Railway private company comes with one share of Keihan Electric Railway. No shares of Keihan Electric Railway may

be sold until its president's certificate has been purchased.

B.13 End of the game

The game ends if any of the following conditions are met,

- 1. The bank breaks
- 2. Player bankruptcy
- 3. After 8 game turns

B.14 B10 Variants

Same with the Hanshin Railways scenario

C 1890

This is the full 1890 scenario.

If you are playing this game for the first time, the Hanshin Railways, Keihanshin Railways, or 1890 Simplified scenario may be a better introduction.

C.1 Number of players

The 1890 scenario is designed to be played with 2 to 7 players. A two player game is very difficult and it will be difficult for a player who makes two consecutive mistakes to be victorious. Three and four players can enjoy various bargains if the player is familiar with the rules. If you have fun as a multiplayer game, I recommend 5-6 play. It will be the most standard play.

C.2 Map

The entire map is used.

C.3 Track tiles

All are available.

C.4 Trains

Type	2	2+2	3	3+3	4	5	6	D	
Count	9	3	5	2	4	3	2	6	_

C.5 Money

The bank size is 12,500円. Set aside 12 500円 and 12 1000円 banknotes for use after the bank breaks. Divide 2,520円 evenly among players as starting capital.

Players	2	3	4	5	6	7 F
Money(円)	1250	840	630	504	420	360

C.6 Phases

Phases 1 to phase 6 are played as normal.

C.7 Certificate Limits

Use the following certificate limits according to the number of players:

Players	2	3	4	5	6	7
Certificates	26	18	15	13	11	10

C.8 Companies

In the 1890 scenario, 6 private companies, 5 minor companies, 4 late private companies, and all 8 public companies are in use. At the start of the game, start the initial stock round in the following company order:

Private companies

	Company	Par (円)
A	Arima Railway	20
В	Kobe Tramway	40
\mathbf{C}	Hankai Tramway	70
D	Hanshin Tramway	110
\mathbf{E}	Keishin Railway	160
F	Osaka Municipal	120
	Electric Railway	

Minor companies

	Company	Par (円)
G	Kanan Railway	100
Η	Osaka Electric Railroad	200
I	Osaka Railway	100
J	Nara Electric Railway	160
K	Kobe Electric Railway	100

C.8.1 Private companies

Private companies block tile lays on the map hexes where their track is. They also carry certain benefits and abilities which are explained as follows:

Arima Railway

20円/5円

The public company which purchases Arima Railway may place a track tile in Arima in addition to its regular track tile placement. The tile does not need to be connected.

Kobe Tramway

40円/10円

No special rules

Hankai Tramway

70円/15(5)円

Does not close in phase 4. However, its revenue is reduced to 5 \square , it may no longer be purchased by a public company, and continues to count as one certificate toward the certificate limit.

Hanshin Tramway

110円/20円

Comes with one regular share of Hanshin Electric Railway.

Keishin Railway

160円/25円

Comes with one regular share Keihan Electric Railway.

Osaka Municipal Electric Railway 220円/ 40円

The purchasing player immediate sets the par price of the Osaka Municipal Subway public company and receives the president's certificate. The par value of Osaka Muncipal Electric Railway then becomes $0 \mid \square$.

During Osaka Muncipal Subway's first operating round turn, it may upgrade one of Osaka Kita, Osaka Higashi, or Osaka Nishi for free.

Osaka Municipal Electric Railway closes when Osaka Municipal Subway buys a train. Even if Osaka Municipal Subway has started, but is trainless, Osaka Municipal Electric Railway will continue to stay open, but the public company's stock price will fall due to non-payment of dividends.

C.8.2 Late private companies

This scenario includes four late private companies. Their rules and benefits are as follows:

Keifuku Electric Railroad 200円/40円

If Keihan has a station token in Kyoto, it will receive 40円 to its treasury each operating round.

Kobe Rapid Transit Railway 240円/?

Kobe Rapid Transit Railway is a special railway company with no trains. There is no fixed income and it earns no revenue from its operation. Although it has a station token in Kobe, there is no obligation to own trains.

Kobe Rapid Transit Railway is started at the moment of purchase by a player. Station tokens other than JR in Kobe will be returned to the owning public companies, the number 6 turn token will be placed in Kobe as a station token of Kobe Rapid Transit Railway. This station token occupies a city space like a regular station tokens and affects train operations in the same way. From this point on, if there is a free space in Kobe, any public company

may place their station tokens in Kobe as usual.

Public companies may ignore the existence of the Kobe Rapid Transit Railway station token by paying a 100 per fee to the bank. This payment is considered to be the company's one station token placement per operating round turn, but does not consume one of its station tokens. This does not apply to JR because it already has a station token in Kobe. Furthermore, Osaka Municipal Subway cannot use this privilege.

Any public company that previously had its token in Kobe is considered to have obtained the privilege to ignore the Kobe Rapid Transit Railway token.

Every time a railway company that does not have a station token in Kobe counts Kobe in its train route for revenue (including those companies which have obtained the privilege described above), Kobe Rapid Transit Railway pays half the value of Kobe as dividend, without changing the revenue for the other railway company.

Kita-Osaka Kyuko Railway 280円/60円

In the operating round following the purchase of the first 6-train, pays a one-time dividend of 100円 in addition to the usual 60円 dividend.

Semboku Rapid Railway 320円/70円

Any public company with a station token in Sakai receives 40 H into its treasury each operating round.

C.8.3 Minor companies

This scenario includes five minor companies. The number printed on the minor company's charter is its operating order, and the corresponding turn order token is used as its station token. Minor companies 2 and 3 operate out of the same station token in Osaka Higashi.

The minor companies 1 to 4 will convert or merge into the Kinki Nippon Railways public company at certain points in the game. This conversion or merger may be declared at any point during the minor company's operating turn.

Each minor company owned by a player counts towards the player's certificate limit. The rules for each minor company are as follows:

1 Kanan Railway

Home: Norohara Par price: 100円 Start Capital: 100円

Beginning in phase 2, merger with Kinki Nippon Railway is possible. The merger with Kinki is forced in phase 3. Kanan Railways is closed and exchanged for a 10% regular share of Kinki. Kinki receives half of Kanan Railway treasury (rounded up) and its trains. The remainder of the treasury is given to the owner of Kanan Railway.

2 Osaka Electric Railroad

Home: Osaka Higashi Par price: 200円 Start capital: 200円

Osaka Electric Railroad is the predecessor of the Kinki Nippon Railways public company. When purchased in the initial stock round, the owner of Osaka Electric Railroad immediately sets the par price for Kinki.

Beginning in phase 2, Osaka Electric Railroad may convert into Kinki Nippon Railways. The conversion into Kinki is forced when the second half of phase 2 begins. Transfer all of Osaka Electric Railroad's assets to Kinki. The owner of Osaka Electric Railroad receives the 20% president's certificate of Kinki in exchange, and Kinki immediately floats.

3 Osaka Railway

Home: Osaka Higashi Par price: 100 Start capital: 100

When Kinki Nippon Railways floats, Osaka Railway is forced to merge. All assets are transferred to Kinki, and the owner of Osaka Railway receives a 10% regular share of

Kinki in exchange.

4 Nara Electric Railway

Home: Kyoto, Nara Par price: 160円 Start capital: 320円 May merge into Kinki Nippon Railways from the beginning of phase 4. Is forced to merge at the beginning of phase 5. All assets are transferred to Kinki and the owner of Nara Electric Railway receives 2 regular shares of Kinki in exchange.

If Kinki already has its station token in the same city as Nara Electric Railway's tokens, the minor company's token is removed. Otherwise, it is replaced with a Kinki station token.

5 Kobe Electric Railway

Home: Tanigami Par price: 100円 Start capital: 200円

At any point during its operating round turn, Kobe Electric Railway may convert to a late private company. After converting, station tokens are remvoed and all assets are returned to the bank. Although the Kobe Electric Railway late private company certificate does not count toward the certificate limit, its face value is 0 . From this point onwards, any public company may place a station token in the city previously occupied by Kobe Electric Railway's token (Tanigami).

C.8.4 Public companies

The 1890 scenario includes eight public companies. Each company has specific rules:

JR (Japan National Railways)

Homes: Osaka Kita, Kyoto, Nara, Kobe Stations: 6

Historically, JR was a state-owned railway until phase 6, and it was operated with the national interest under consideration. In this game, JR represents the JR-West subsidiary of the Japan Railways group. JR is played as a normal public company except for the following:

- The par price for JR is 100円
- JR has a higher train limit than other public companies.

Phase 1: 6 trains Phase 2-3: 4 trains Phase 4-6: 3 trains

- When distributing operating revenue, JR pays half dividends. The first half of the revenue (rounded up) is paid to the company treasury. The remainder of the revenue is then distributed among shareholders. Revenue may also be withheld as usual.
- In phases 1 to 3, JR can lay or upgrade 2 track tiles per operating round in different hexes. Performing two tile actions in the same hex in one operating round is prohibited.

Osaka Subway (Osaka Municipal Subway)

Home: Osaka Nishi Stations: 1

The par price for Osaka Municipal Subway is set immediately when the Osaka Municipal Electric Railroad private company is purchased in the initial stock round.

Subway service After phase 4, subway service is established in the city of Osaka. Osaka Subway may ignore other companies' station tokens in the Osaka tiles (Osaka Kita, Osaka Higashi, Osaka Nishi, and Osaka Minami) if they have been upgraded to brown.

Special tile placement During its first operating turn, Osaka Subway can place one tile in Osaka free of charge.

Keihan (Keihan Electric Railway)

Home: Hirakata Stations: 3

Keihan will be float when 4 shares have been bought from the initial offer because the Keishin Railway private company comes with one regular share of Keihan.

The Keihan share attached to Keishin Railway may not be sold until the president's certificate of Keihan has been purchased.

Nankai (Nankai Electric Railway)

Home: Osaka Minami Stations: 3

No special rules

Kinki (Kinki Nippon Railways)

Home: Osaka Higashi (Kashiwara, Kyoto, Nara)

Stations: 6

Kinki Nippon Railways was historically formed through the merger of a large number of smaller railway companies. In this scenario, the Osaka Electric Railroad, Osaka Railway, Kanan Railway, and Nara Electric Railway minor companies will merge to form Kinki.

The par price of Kinki share certificates will be decided immediately by the player who purchased Osaka Electric Railroad in the initial stock round.

Each minor company will be replaced by one or two Kintetsu share certificates upon merger with Kintetsu. Moreover, the president's certificate of Kinki is reserved for Osaka Electric Railroad. These trade-in share certificates are reserved by the bank until then and can not be bought or sold until the merger or conversion. In other words, only 4 Kinki stock certificates can be purchased from the initial offer. These four stock certificates can be bought and sold from the first stock round as usual, but they will not earn any income until Kinki begins operations.

Each minor company may declare merger or conversion into Kinki, in between company operations. The process and timing for merger and conversion is described in paragraph C.8.3

Kinki Nippon Railway forms when Osaka Electric Railway declares that it will convert. Then, the Osaka Railway minor company is immediately merged into Kinki. Kanan Railway may also choose to merge at this time. Kinki immediately floats, even if none of its shares have been purchased from the initial offer. It now receives additional starting capital equal to 4 times its par price.

Immediately after Kinki floats, it performs a special operating round out of turn order. During this special operating round, the share price of Kinki does not drop due to non-payment of dividends. If dividends are paid, the share price increases as nor-

mal. Kinki does not operate again during the round in which it performed this special operating round.

Kinki's stock price will not rise until Nara Electric Railway merges, as the stock certificates reserved for mergers do not count as being sold.

If Kinki closes before all minor companies have merged, the remaining minor companies are unable to merge with Kinki and will close when they would otherwise be forced to merge.

Sanyo (Sanyo Electric Railway)

Home: Akashi Stations: 2

No special rules

Hanshin (Hanshin Electric Railway)

Home: Nishinomiya Stations: 3

Hanshin floats when 4 shares are purchased, since the Hanshin Tramway private company comes with 1 share of Hanshin stock.

Until the Hanshin president's certificate is purchased, the share attached to Hanshin Tramway cannot be sold.

Hanshin Tigers Hanshin Electric Railway receives bonus revenue due to the popularity of the Hanshin Tigers baseball team. After Nishinomiya is upgraded to brown, if Hanshin operates routes which include Nishinomiya, increase operating revenue by 10円, and also add 10円 to the Hanshin company treasury from the bank.

Hankyu (Hankyu Railways)

Home: Toyonaka Stations: 4

Takarazuka Revue Hankyu profits from popularity of the Takarazuka Revue musical troupe. If Hankyu has a station token in Takarazuka, it receives 40円 to its treasury each operating round.

Hankyu Land Commercial Code Every time Hankyu lays a yellow track tile, it receives 10円 into the company treasury.

C.9 End of the game

The game will end if any of the following conditions are met:

- 1. The bank breaks
- 2. Player bankruptcy
- 3. After 10 game turns.

C.10 Variants

These variants can be used to change the evolution of the game. Some variants will disrupt game balance and change the experience significantly.

C.10.1 Hidden personal cash

The amount of player cash is secret. Players do not need to respond to inquiries about their cash holdings.

C.10.2 Hiding of train purchase price

The buying and selling of trains between companies must be made public to other players, but it is not necessary to make their prices public.

C.10.3 Change D-trains to 8-trains

D-trains can visit only 8 cities in their route. All other properties, including the ability to trade in a 4-, 5-, or 6-train, are the same.

C.10.4 Forced closure of minor companies

At the beginning of phase 5, Kobe Electric Railway is forced to convert to a late private company.

C.10.5 End of game when highest stock price is reached

The game is over when the stock price of a public company reaches 400円. If the price reached 400円 during the operating round, the game ends immediately after the company's operating turn. If the prices reaches 400円 at the end of a stock round, the game ends immediately.

C.10.6 Kobe Rapid Transit Revenue Control

Reduce the value of Kobe to 10 \square in yellow, 15 \square in green, and 20 \square in brown.

C.10.7 Late private company abilities

Remove all late private company special abilities. Kobe Rapid Transit Railway pays a fixed dividend of 50円.

C.10.8 Tile placement restrictions

Brown tile #78 may only be placed in Nara or a city bordering the sea or the Yodo river.

C.10.9 Public company floatation

This variant changes the rules for floating public companies, making them easier to start. Incorporating this variant will produce a more aggressive game experience.

When a company would begin its very first operating turn, check the number of 10% shares which have been sold from the initial offering. If this number is greater than or equal to the rank of the train currently for sale from the bank, then the company floats and may operate. Otherwise, the company is considered not to have floated, and will not take an operating turn. At the beginning of the game, only the 20% president's certificate needs to be sold in order for a company to float and operate. Later in the game, if for example the current train available for sale is a 3T or 3+3T, then a public company must have sold at least 3 shares from the initial offer in order float and operate.

Instead of receiving ten times the par value when floating, public companies receive money as shares are sold from the initial offer. The shares of Hanshin, Keihan, and Osaka Subway that are attached to private companies are considered to be already sold, and the respective public companies will begin the game with those funds in their treasuries.

Additionally:

- After phase 5, public companies will be started using the normal rules. 50% of shares must be sold from the initial offer to float, and the company receives 10 times the par value to its treasury.
- JR does not float unless 5 shares (50%) are purchased from the initial offer
- Kinki Nippon Railway is started as normal, when Osaka Electric Railway converts. If the non-reserved shares of Kinki are bought from the initial offer before the company is

formed, the money from those sales is still added to the Kinki treasury.

C.10.10 Privatization of JR

Historically, JR transformed from a national railway to a private railway company. After phase 6, JR will pay full dividends instead of half.

C.10.11 Kinki as a Normal Company

While the treatment of Kinki Nippon Railways in 1890 aims to simulate its historical development, it also creates extra rules burdens. In this variant, minor companies 1-4 are eliminated, and Kinki is started like a normal public company.

In addition to 2 regular station tokens, Kinki will have 4 station tokens that are automatically placed at the beginning of the following game phases:

Phase 1 Osaka Higashi

Phase 2 Kashiwara

Phase 3 Nara

Phase 4 Kyoto

Automatically placed station tokens are placed at the very beginning of each operating round, at no cost. These tokens are treated as home tokens, and reserve a space in their cities. Follow normal token placement rules for the automatic station tokens: connectivity and a free city space is required. If possible, multiple automatic tokens may be placed at once.

When using this variant, remove three 2-trains and all 3+3-trains.

C.10.12 Hanshin Tigers

This variant requires one six-sided die. After Nishinomiya is upgraded to brown, instead of receiving a fixed amount, Hanshin Electric Railway will receive a variable bonus if its routes include Nishinomiya.

Each operating turn in which Hanshin runs to the brown Nishinominya tile, roll the die. The value of Nishinomiya will be determined by the result and the following table:

C.10.13 Great Hanshin Earthquake

This variant simulates the Great Hanshin Earthquake of January 1995, which caused major damage to the Hanshin region. In particular, Nishinomiya, Ashiya, and Kobe suffered heavy damage, and urban functions were destroyed in the city centers. Building collapses and fires caused many to lose their homes and many of the affected people still live in refugee housing. Many industries were disrupted due to the ensuing financial instability and economic recession. Despite signficant time and money spent for recovery, the effects of this disaster are still seen today.

Label the reverse side of one D-train with the word "Earthquake", and shuffle it with the other D-trains during game setup. The Great Hanshin Earthquake will occur when this labeled D-train is purchased, unless the bank has already broken at that point.

If the earthquake occurs, then until the next stock round Hanshin Railway's income will be 0, and the incomes for Hankyu, Sanyo, and JR will be reduced by half. During this time, stock prices will be frozen and will not move.

Kobe Rapid Transit Railway is closed, and the station tokens in Kobe and Ashiya are removed and returned to their owning companies. The Nishinomiya tile is downgraded one level. Tokens in Itami are flipped face down. After the next stock round, companies may pay 100円 to flip them back face up.

Charity Payments: Each player pays the following amount to the bank by the end of the next stock round.

```
(# D-trains already sold \times 100円)+
(# of shares held \times 200円)
```

This amount is calculated at the time the earthquake occurs. If cash on hand is insufficient to make the payment, then shares must be sold to make up the difference.

C.10.14 Second World War Air Raids

At the end of World War II, the United States military conducted a sustained campaign of air raids in cities around Japan's four largest industrial areas. These bombings resulted in many civilian deaths and impeded economic recovery after the war. The Hanshin region was particularly impacted as it formed a large part of Japan's industrial base, Osaka, Kobe, and Amagasaki were targeted for bombing.

After the last 3+3-train is purchased, the air raids will take place. Discard all green tiles from Kobe, Ashiya, Nishinomiya, Amagasaki, Osaka Kita, Osaka Nishi, Osaka Higashi, and Osaka Minami, as well as surrounding hexes. Yellow tiles will not be discarded. Green track tiles that were removed from empty map hexes must be laid again starting with yellow, and repaying any terrain costs.

After green tiles have been removed, station tokens are replaced. Tokens may not be replaced into spaces reserved for unstarted companies. If a city contains station tokens from multiple companies and there are no longer enough token spaces, then the tokens are placed in operating order beginning with the company after the one that purchased the last 3+3-train. Remaining tokens will be placed on the tile, as a reserved token. When the tile is upgraded creating a new token space, the reserved token will automatically fill that space. At any time, reserved tokens may be removed to be used elsewhere as a normal 100 \mathrm{\Pi}\station station token.

D 1890 Simplified

This is a tactical version of the 1890 scenario. Special rules for companies are removed so that players can become accustomed to the game.

D.1 Number of Players

2-7 players.

D.2 Map

The entire map is used.

D.3 Track tiles

All are available.

D.4 Trains

Type	2	2+2	3	3+3	4	5	6	D
Count	6	3	5	0	4	3	2	6

D.5 Money

The bank size is 12,500円. Set aside 12 500円 and 12 1000円 banknotes for use after the bank breaks. Divide 2,520円 evenly among players as starting capital.

Players	2	3	4	5	6	7
Money(円)	1250	840	630	504	420	360

D.6 Phases

Phases 1 to phase 6 are played as normal.

D.7 Certificate Limits

Use the following certificate limits according to the number of players:

Players	2	3	4	5	6	7
Certificates	26	18	15	13	11	10

D.8 Companies

This scenario includes, 6 private companies, and 1 minor company, and all 8 public companies are in use. No late private companies are used. At the start of the game, start the initial stock round in the following company order:

Private companies

	Company	Par (円)
A	Arima Railway	20
В	Kobe Tramway	40
\mathbf{C}	Hankai Tramway	70
D	Hanshin Tramway	110
\mathbf{E}	Keishin Railway	160
\mathbf{F}	Osaka Municipal Electric	120
	Railway	

Minor companies

	Company	Par (円)
K	Kobe Electric Railway	100

D.8.1 Private Companies

Same as the full 1890 scenario.

D.8.2 Late Private Companies

Not used.

D.8.3 Minor Companies

5 Kobe Electric Railway

Home: Tanigami Par price: 100円 Start capital: 200円

At any point during its operating round turn, Kobe Electric Railway may convert to a late private company. After converting, station tokens are remvoed and all assets are returned to the bank. Although the Kobe Electric Railway late private company certificate does not count toward the certificate limit, its face value is 0 . From this point onwards, any public company may place a station token in the city previously occupied by Kobe Electric Railway's token (Tanigami).

D.8.4 Public Companies

The 1890 Simplified scenario includes eight public companies. Some companies have special rules for floating or operation:

Kinki (Kinki Nippon Railways)

Home: Osaka Higashi (Kashiwara, Kyoto,

Nara) Stations: 6

Use the Kinki as a Normal Company variant from the 1890 scenario (paragraph C.10.11).

JR (Japan National Railways)

Homes: Osaka Kita, Kyoto, Nara, Kobe

Stations: 6

Historically, JR was a state-owned railway until phase 6, and it was operated with the national interest under consideration. In this game, JR represents the JR-West subsidiary of the Japan Railways group. JR is played as a normal public company except for the following:

- The par price for JR is 100円
- JR has a higher train limit than other public companies.

Phase 1: 6 trains Phase 2-3: 4 trains Phase 4-6: 3 trains

- When distributing operating revenue, JR pays half dividends. The first half of the revenue (rounded up) is paid to the company treasury. The remainder of the revenue is then distributed among shareholders. Revenue may also be withheld as usual.
- In phases 1 to 3, JR can lay or upgrade 2 track tiles per operating round in different hexes. Performing two tile actions in the same hex in one operating round is prohibited.

Osaka Subway (Osaka Municipal Subway) Home: Osaka Nishi Stations: 1

The par price for Osaka Municipal Subway is set immediately when the Osaka Municipal Electric Railroad private company is purchased in the initial stock round.

Subway service After phase 4, subway service is established in the city of Osaka.

Osaka Subway may ignore other companies' station tokens in the Osaka tiles (Osaka Kita, Osaka Higashi, Osaka Nishi, and Osaka Minami) if they have been upgraded to brown.

Special tile placement During its first operating turn, Osaka Subway can place one tile in Osaka free of charge.

Keihan (Keihan Electric Railway)

Home: Hirakata Stations: 3

Keihan floats when 4 shares have been bought from the initial offer because the Keishin Railway private company comes with 1 share of Keihan stock.

The Keihan share attached to Keishin Railway may not be sold until the president's certificate of Keihan has been purchased.

Nankai (Nankai Electric Railway)

Home: Osaka Minami Stations: 3

No special rules.

Hanshin (Hanshin Electric Railway)

Home: Nishinomiya Stations: 3

Hanshin floats when 4 shares have been bought from the initial offer because the Hanshin Tramway private company comes with 1 share of Hanshin stock.

The Hanshin share attached to Hanshin Tramway may not be sold until the president's certificate of Hanshin has been purchased.

Hankyu (Hankyu Railways)

Home: Toyonaka Stations: 4

No special rules.

D.9 End of the game

The game will end if any of the following conditions are met:

- 1. The bank breaks
- 2. Player bankruptcy
- 3. After 10 game turns.

II Designer's Notes

Shinichi Takasaki (高崎真一)

It was around the early summer of 1996 that I started making 1830 type games with the idea of using familiar themes of Japan and railways in the Kinki region.

The first step was to decide the scale of the map.

The Kinki region's railway network includes Osaka, Kyoto, Kobe, Nara, and Wakayama. There are also private railways in Shiga Prefecture and Himeji. JR's rail network also includes all of them. Therefore, we decided to include the 5 major private railway companies (Hanshin, Hankyu, Keihan, Kinki, and Nankai). However, there are significant differences between Kinki and the other four companies.

In the end, I wanted to create a scale that would allow me to comfortably express the distance between Kyoto and Osaka, between Kobe and Osaka, and between Wakayama and Osaka. I decided to set the distance between Kyoto and Osaka (about 34 km) to 5 hexes. In other words, the distance between hexes is about 7 km.

The next issue in map design was how to represent Osaka. Osaka is too big to be represented by a single hex, and there was also the issue of Osaka's revenue value. Osaka, which has twice the population of Kyoto or Kobe, must become a source of income for each railway. This problem was solved by representing Osaka with four hexes, which would also allow the Osaka Loop Line to be represented.

I wanted to have a total of eight public companies, so I needed to select three more in addition to the five major companies I had already decided to use.

JR is a clear choice, but representing its large scale is a problem. Historically, JR was formed through the merger of various private and provincial railways into the national railway. I considered a merger process like in 1856, it was not a good fit due to differences in the timings and reasons for the mergers. In the end, I decided on using the combination of multiple tile lays with multiple start tokens to represent the parallel track development in multiple locations.

The seventh company was the Osaka Subway.

The Osaka Subway has a rather long rail network, but there is not much development into the suburbs. This was represented by its sole station token in Osaka Nishi.

I decided on Sanyo Electric Railway for the eight company. Its addition required that the map be spread westward from Kobe. This was solved by expanding two hexes to the west and making Himeji an off-board area.

I was bothered by Kinki's treatment. Compared to other railway companies, it was too large because I wanted to represent its history as the merger of several smaller companies. Even ignoring its routes near Nagoya and considering only its routes near Osaka, we must deal with several mergers: Daiki, Daitetsu, Sangu Express, Nara Electric, and so on. Therefore, I decided to form Kinki like in 1835 or 2038. By changing the merger timings, I was able to represent how some companies did not join until the 1960s, such as Nara Electric. As a result, the formation of Kinki is an important theme of the game.

The next issue was the choice of private companies. At first I considered selecting railways with values of 20, 40, 70, 110, 160, and 220 as in 1830, but could not decide on a good set. In general there are too many private railway companies in Kansai; it is called the "private railway kingdom" for good reason.

What was once famous has been erased by the waves of time...

One such thing is the tram. Osaka, Kyoto, and Kobe streetcars, Hanshin Tramway, Keishin Electric Railway ... Of course, Hanshin Electric Railway and Keifuku Electric Railway still operate today.

First of all, you can think of Osaka Municipal Electric Railway as the B&O, where Osaka Subway is started instead. Next, Keishin Electric Railway, which has recently been lost due to the introduction of the Kyoto tram, is a high-value line. (In fact, it was under the control of Keihan in 1996 when I started designing, but it was still in good working order.)

As of now, Hanshin Tramway is in its 23rd year

of operation. It played an important role as one of Hanshin's arteries.

Hankai Tramway is still popular with working class people. However, it no longer enjoys status as a major artery connecting Osaka and Sakai.

Some railways were left untouched by the war.

In addition to the Arima Railway, there were several other mountain railroads I considered. The Mt. Atago railway was not included because that was outside the game board's scope of central Keihanshin. Nose Electric Railway was another option which was omitted in the end.

I wanted to include newly constructed railways such as the Kita Osaka Kyuko Railway, Semboku Rapid Railway and Kobe Rapid Transit Railway.

I wanted to pick up the newly constructed railway. Kita Osaka Express, Senboku Expressway, Kobe Express, etc.

I wanted to build these after the main company was established. 1829 has a system like this, which I emulated. In 1829, it was a steamship company that put a token on a port town to receive \$ 40 each turn. I applied this concept to the Semboku Rapid Railway.

The Kobe Rapid Transit Railway is the most unique railroad, in that it does not own a train, but instead works to connect routes of other companies. This year, the Hanshin / Hankyu / Sanyo mutual service finally completed a direct express connection between Umeda and Himeji. Therefore, in the game, we have created a station token that is shared among several railway companies.

Kita-Osaka Express is also active as an extension of the subway's Midosuji Line. This railway is now famous as the cheapest route in the country. In addition, at the time of the 1970 World Expo, a dedicated station was established to transport large numbers of passengers.

I added some Kansai flavor at the end. Of course, the aforementioned formation of Kinki and the Kobe Rapid Transit Railway provide Kansai theme, but as a Hanshin fan, I wanted to include the Tigers. Certainly, if the Tigers win, the economic effect is significant. (Well, they rarely win nowadays, but they were very strong until the 1950s. I'm wondering what kind of economic effect they had...)

The effects of the Hankyu Takarazuka and Land Commercial Code were other items I wished to include. These make Hankyu a magnificent company.

The Great Hanshin Earthquake was also a recent memory, and I wanted to create rules that reflected my lived experiences. (Maybe if an outsider created these rules it would be frowned upon, but as a Kansai resident, I definitely wanted this rule for posterity.)

Some rules were changed during playtesting

First, the Great Hanshin Earthquake rule was made optional because it unilaterally disadvantaged those who owned companies in Hanshin. However, it is a rule I would like to revisit.

Next, Hanshin Tramway was changed to include 1 share of Hanshin. Due to the advantages of Hankyu, the establishment of Hanshin was delayed and the map north of Osaka was poorly balanced. Historically, Hanshin started 15 years before Hankyu and was more developed than Hankyu do the large population along its route. Additionally, even though it became famous through Hankyu, the so-called Land Commercial Code, which developed railway lines through residential land, was actually initiated by Hanshin. Hankyu's headquarters changed from Umeda (Osaka Kita) to Toyonaka.

The track connections in Osaka were also changed. In yellow, JR was only able to go from Osaka Kita to Osaka Higashi. However if JR was not yet started Hankyu and Hanshin could pass through the JR token spot and place tokens in Osaka Higashi. On the other hand, Keihan and Kinki have the opportunity to place tokens in Osaka North, killing the runs until green. Since green tiles can not be placed until Osaka Municipal Electric Railway closes, this results in a rough play.

There remains an issue one private company which has not been resolved. I had believed that Uji Electric Railway was located in Uji, but in fact it was a predecessor to Sanyo Electric Railway. The reason that a company named "Uji Electric Railway" was located near Kobe was that it was run by a power company from Uji.

I was in fact quite ignorant of Kansai Railway history when I began designing, and studied it during the game development process. A good idea, right?

Finally, I would like to thank Mr. Izumi and other members of the Sakura Association who participated in playtesting from the beginning and gave their valuable opinions.

Footnote:

After these designer's notes were written (August 1998), we decided to use Kobe Tramway instead of Uji Electric Railway. Also, since the game has various minor corrections, I would like to make a revised note including them if there is the opportunity. –Izumi

III Producer's Notes

Izumi (泉)

My relationship with 1890 started 3 years ago, when Takasaki-san brought it to the Sakura Association, saying, "look what I have...". He had what appeared to be a map of Kansai divided into hexes, and a game called 1890 which used rules from the 18XX series. At the time, I decided to play it at a later date.

At the time, I did not know what 18XX was, so I learned 1856 from Mr. Nakao of Soldier (Kyoto's game circle). I started to feel excitement in my heart when I began to considered all the possibilities offered by the game. In this way, the Railway Promotion Committee (Izumi/Kamiya) of the Sakura Association was established, and I played 1856 like a monkey. As I recall, somebody said, "what ever happened to 1890?", and Mr. Takasaki brought it to us to play for the first time.

Unlike 1856, 1890 has minor companies and late private companies. "What a refreshing game", I laughed. After many plays, I realized that the merit of the late private companies is their stable asset value, which is useful for a self-bankruptcy play. I also discovered that development from the east to the south of Osaka would be difficult without the minor companies.

After several plays, revising the rules, map, and tile manifest, etc., I thought, "This would be a waste not to share with the world.". So I decided make a version for public distribution.

It took until the eve of August 1998 for the first distribution version to be produced. I knew there were problems here and there but I wanted to distribute it on a trial basis, and so gave it out free of charge.

After that, development of the next version was suspended due to computer issues, which were not resolved until 1999. In March, the 3rd edition was created. In August, an edition was created for the Summer Comiket fair. In April 2004, version 3.2 was released. This included a complete revision of the manual, but it was so messy that new mistakes were introduced. This edition is the 4th edition with English language support (except for the manual). Basically, if you remove all the bugs from this version, 1890 will be finished, although the manual will also require some touch ups.

Behind the development of 1890 was a year-long struggle concerning my employment at Orient Computer Instruments Ltd., where I experienced severe labor practices on repeated instances. I was asked to submit a pledge not to join a labor union, but refused to do so. Upon joining a union, I was immediately dismissed. Following a lawsuit, I was able to rejoin the company, but was dismissed once more after enduring various harrassments: changing workplaces, isolated workplaces, and having to perform light packing jobs in front of the company president. Again, the issue was settled in court, but this time I did not return to work. Instead I received settlement money, which is a result I was satisfied with.

In April 2001, I enrolled in acupuncture college and decided to begin a career path in traditional medicine. Although I suspect my days ahead will be busy, I hope to find time to play games such as 18xx.

IV Phase Summary

Phase	Train (Quantity)	Rust	Train Limit (Minor/Public/JR)	Comments	ORs	Tiles
$\frac{1}{1\frac{1}{2}}$	2T (9) 2+2T (3)				1	
2	3T (5)		2/4/6	 Public companies may buy private companies Osaka Electric may convert Kanan may merge 	2	
$2\frac{1}{2}$	3+3 (2)			Osaka Electric must convert		
3	4T (4)	2T	1/3/4	• Kanan must merge		
4	5T (3)	2+2T	1/2/3	 Private companies close Nara Electric may merge 	3	
5	6T (2)	3T, 3+3T		 Nara Electric must merge Bonus dividend for Kita-Osaka Kyuko Railway D-trains may be purchased. 		
6	D (6)	4T				

V Tile Manifest

Tile	#	Legal Upgrades
57	4	14 205 206
6	2	12 14 15 15 205
		206
202	1	821 822
	1	No further upgrades
	1	No further upgrades
56	1	No further upgrades
69	1	No further upgrades
3	2	No further upgrades
4	3	No further upgrades
58	3	No further upgrades
7	4	1. 18 1. 26 1. 27 1. 28
		\(\) . 29
1.8	8	16 19 23 24
		7 25 7 28 7 29
9	7	
		24 26 27
824	1	834
823	1	833
820	1	830
835	1	835
210	1	217
211	1	217
821	1	831
822	1	831
14	2	63 74
15	2	63 74 78 465
12	2	63 74 78 839
205	1	63 74 193 465
206	1	63 74 193 465
16	2	× 43 × 70
18	1	X ₀ 43

Tile	#	Legal Upgrades
19	2	₹° 45
20	2	₹ ₄₄ ₩ ₄₇
23	3	41 N. 43 X. 45 47
24	3	7. 42 × 43 × 46 × 47
25	3	7 40 4 5 4 5
26	2	1 . 42 2 . 44 3 . 45
27	2	41 7.46
1. 28	2	1 46 3 70
1. 29	2	₹ ₄₅ ₹ ₇₀
834	1	No further upgrades
833	1	No further upgrades
839	1	No further upgrades
830	1	No further upgrades
835	1	No further upgrades
217	2	No further upgrades
831	2	No further upgrades
465	1	No further upgrades
63	3	No further upgrades
74	1	No further upgrades
193	3	No further upgrades
A . 39	1	No further upgrades
7 40	1	No further upgrades
41	2	No further upgrades
42	2	No further upgrades
43	1	No further upgrades
44	2	No further upgrades
45	2	No further upgrades
46	2	No further upgrades
47	2	No further upgrades
3 70	1	No further upgrades

This manifest reflects Carthaginian's PnP files, with these exceptions: a) Tile 74 is numbered as a duplicate 830 in Carthaginian. b) Tile 611 in Carthaginian is omitted.

VI Frequently Asked Questions

This is list follows the rubric used by the 18xx Rules Differences website (http://www.fwtwr.com/18xx/rules_difference_list/index.htm)

1 First Share Dealing Round

1.1 How much cash do players start with?

Players	2	3	4	5	6	7
Money(円)	1250	840	630	504	420	360

1.2 Does the price of a private company drop by 5 for no sale in the first round?

Yes, first private only. (subsubsection 9.3.1)

1.3 Can you sell company shares in the first round?

No. (subsubsection 8.3.2)

1.4 Can you make advance bids?

Yes, at 5 or more over par and over any other bid. (paragraph 9.1.3.1)

2 Subsequent share dealing rounds

2.1 Is there a specific order to buying and selling on your turn?

Sell then buy, or buy then sell. (subsection 8.5)

2.2 Are you limited to buying one certificate on your turn?

Yes. (subsection 8.4)

2.3 When can you first sell shares in a company?

From the second stock round onwards. (subsubsection 8.3.2)

2.4 Does the bank pool have a per-company share limit?

50% (subsubsection 8.3.2)

2.5 What are the player certificate limits?

Players	2	3	4	5	6	7
Certificates	26	18	15	13	11	10

2.6 What are the player certificate limits for shares in one company?

60%. Shares in the brown zone do not count towards this. (subsubsection 6.3.1)

2.7 Does the stock price drop when stock is sold?

Yes, 1 row per share. (subsubsection 8.3.1)

2.8 Does the stock price go up at the end of the share dealing round for a fully-held corporation?

Yes. (subsubsection 8.6.1)

2.9 Can you buy a certificate and immediately sell a certificate in the samecompany?

Yes. (subsection 8.5)

2.10 Can companies buy shares?

Privates, in ORs, once a 3 train has been sold, and only public companies. (subsection 10.9)

2.11 What ends a share dealing round?

Each player consecutively not making a purchase or a sale. The priority then goes to the player after the one who last made a purchase or a sale. (subsection 8.6)

3 Company flotation

3.1 Do you lay the base station token immediately upon floating?

The token is placed on the home base at the start of the operating round in which it will first run. (subsubsection 10.4.1)

3.2 How many shares must be sold for a company to float?

Minor companies float when sold in the ISR. Public companies float when 50% of shares are sold from the IPO, except for Kinki Nippon Railways, which floats when a minor company converts into it. (section 7)

3.3 Does a company get full capitalization upon floating?

Yes. (subsubsection 7.3.2)

3.4 How is a share company's initial (par) price determined?

The price is set by the player who purchases the President's certificate, choosing a value selected from a range of predefined prices. The purchaser of the Osaka Electric Railway minor company sets the par price for Kinki. (subsubsection 7.3.1)

4 Operations

4.1 In what order do companies operate?

First, minor companies in numeric order, then public companies in descending share price. If two companies occupy the same space, the company with its token on top operates first. If two companies have the same price but in different spaces, the company with its token furthest to the right operates first. (subsection 10.3)

4.2 If you sell shares so that their tokens end up in one stack, what order are they stacked in?

Unspecified.

5 Tile Lays

5.1 Where can you make an initial tile lay?

As for 1830. (paragraph 10.3.1.1)

5.2 Can you lay two tiles in a turn?

Only by using the special property of a private. (paragraph C.8.1)

5.3 Must a tile replacement extend exiting track?

Not specified, presumably permissive.

5.4 Do villages upgrade?

No.

6 Station Markers

6.1 Cost of station markers

0 for home bases, 40, 100.

6.2 Can you lay more than one station marker per turn?

No. (subsubsection 10.4.2)

6.3 Where can you lay a station marker?

The newly-laid station marker must be reachable from one of the laying company's existing station markers by an arbitrarily large train. (subsubsection 10.4.3)

6.4 When is a company's first station marker laid?

When it first operates. (subsubsection 10.4.1)

7 Train Runs

7.1 Can you run into a city completely filled by rival station markers?

Yes. (subsubsection 10.5.2)

7.2 Can you do a run that passes through a city completely filled by rival station markers?

No, except for Kobe Rapid Transit Railway, and Osaka Subway in brown. (subsubsection 10.5.2, paragraph C.8.2, paragraph D.8.4)

7.3 Unusual rules about running

Plus trains (2+2T, 3+3T) can include an additional number of villages in their run.

7.4 Can one train run to two stations on the same tile?

Yes. (subsubsection 10.5.2)

7.5 Is double-heading allowed?

No.

7.6 Rules about villages

No special rules.

7.7 Must the maximum possible revenue be claimed?

No. (subsubsection 10.5.1)

8 Payment of Earnings

8.1 Does stock move right for payment of dividends?

Yes. (subsubsection 10.6.4)

8.2 What dividend payments go into the company's treasury?

Those for shares in the bank pool. (subsubsection 10.6.2)

8.3 Does stock move left for withheld earnings?

Yes. (subsubsection 10.6.4)

8.4 Can a company make a partial payout?

Minor companies and JR always make a 50% payout. (subsubsection 10.6.1, paragraph A.8.4)

9 Purchasing Trains

9.1 Can companies buy trains from one another?

Yes, minimum price 1円. (subsubsection 12.4.2)

9.2 Must a major share company buy a train if it does not have one?

If it has a route. (subsection 12.3)

9.3 Can trains be sold back to the bank?

No.

9.4 When a company is forced to buy a train and connot buy one with its own means, what train may it then buy?

The cheapest train from the open market or the bank. (subsection 12.5)

9.5 Must a minor company buy a train if it does not have one?

If it has a route.

9.6 Can trains of the final type be purchased as soon as one train of the next-to-last type is purchased?

Yes. (subsection 12.4)

9.7 Can a company buy more than one train from the bank per OR?

Yes.

10 Private Companies

10.1 Are private companies purchaseable between players?

Yes, on the buyer's turn. (subsection 8.4)

10.2 Are private companies purchaseable by share companies

Yes. Public companies may purchase privates after a 3-train has been sold, at from half to twice face value. (subsection 10.9)

10.3 Does a private company prevent builds in its home hex(es) while it is owned by a player?

Yes.

10.4 Does using a private company's special property close it?

Only Osaka Municipal Electric Railway, when Osaka Subway buys its first train.

10.5 When do private companies close?

When the first 5-train is sold.

10.6 Can you buy and sell private companies in other ways?

Late private companies may be bought from the bank from SR2 onwards, but may not be sold to other players or companies.

11 Directorship/Presidency of a Share Company

11.1 Can you sell the director's certificate into the bank pool?

No.

11.2 Can you exchange the director's certificate for regular shares from another player when you sell shares to the bank pool?

Yes.

11.3 After a sale of shares forces a change in Director, who gets it in case of a tie?

Next qualifying player on seller's left. (subsection 6.5)

12 Game Phases

See section IV

13 End of Game

13.1 Game ends immediately with a bankruptcy?

Yes. (subsection 13.2)

13.2 What happens if the bank runs out of money during an operating round?

Game ends at the end of current set of operating rounds. (subsection 13.3

13.3 What happens when stock first hits the top end of the market?

Nothing.

13.4 What happens if the bank runs out of money during a stock round?

Complete the next set of operating rounds. (subsection 13.3)

14 Secrecy

14.1 Is a player's cash secret, or open for inspection?

Open. (subsection 2.1)

14.2 Is a company's cash secret, or open for inspection?

Secret. (subsection 2.2)

14.3 Is the cash involved in transactions secret, or must it be made public?

Not stated.

14.4 Is the cash in the bank secret, or must it be made public?

Not stated. Assumed to be public.