TODO: Decide if this LaTeXsource should be refined into the final version, or everything should just be imported into AAG's usual DTP program.

TODO: Add title page.

TODO: Replace $ by the final money symbol.

TODO: Adjust to final game design (corporation names and symbols (or call them logo now?), description of components, does play money exist?, circles vs. diamonds for synergies ...).

TODO: Perhaps move certain things into "boxes": Receivership could be explained in a box rather than its own section. Whenever a special ability is explained, it could be put into a box with the corporations logo in the background.

Contents

Chapter 1

Learning the game

This chapter is an introduction to the game *Rolling Stock Stars*. It is written in a casual and easy-to-understand way, with a lot of examples, figures, and helpful explanations. Read it first to learn the game.

Later, when you need to refresh your knowledge of the rules or you want a precise answer to rules questions, refer to the canonical rules (the smaller booklet delivered with the game). Those rules are supposed to be the single and complete "source of truth". Thus, all the examples and explanations in this introduction are meant as a help to understand the rules but not to add or change any rules.

1.1 Overview

Rolling Stock Stars is a card game for three to six players. The players take the role of investors. They buy private companies, which they may later turn into corporations or sell to already existing corporations. In addition, they can trade shares of those corporations. The player with the most shares in a corporation becomes its president and controls its actions. Corporations may own any number of those formerly private companies (that were sold to them by players or were used as the seed to found a new corporation). Companies owned by corporations are called *subsidiary companies*. Corporations can even buy subsidiary companies from each other.

Note the nomenclature here: Corporations could also be called "public companies". However, to avoid confusion, we want to keep the meaning of the word "company" narrow and will not use it for corporations (but for the subsidiary companies they own).

Subsidiary companies owned by the same corporation may create synergies with each other, increasing the income of the corporation. These synergies can be seen as a quite abstract representation of transportation networks. (*Rolling Stock Stars* has no board and therefore lacks a more concrete representation of transportation networks, as you might know it from similarly themed games.)

As more and more newer companies are brought into the game, older companies become less profitable and have to be written off eventually. Corporations have to struggle to stand the test of time.

In the end, the richest player wins the game, measured by the added values of privately owned companies, shares of corporations, and cash.

Thematically, the game starts in the 1830s in Prussia. The private companies initially available are early Prussian railroad companies. Throughout the game, the scope widens. First to Germany, then to Europe. Even some non-railroad companies entere the game; the last tier of companies represents container ports and airports.

1.2 Components

The game contains two booklets: One is titled *Player's Guide* (you are reading it right now), the other is the actual rules (written in a very concise and formal way – comes in handy if you are looking for precise answers to your most delicate rules questions, but definitely not suitable for learning the rules).

There are six *turn summaries*, describing the nine phases of a game turn. Hand out one to each player.

TODO: Add figure with "synergy markers".

Furthermore, you will find 109 round double-sided *synergy markers* (see figure above). There is something missing in the box, however: *play money*. Please use play money from another game or – much preferred – poker chips. **TODO: If play money is included, change this sentence.** The synergy markers and the money are meant to be unlimited. In the unlikely case that you run out of these components, find other means of tracking money and synergies. (Even a small set of poker chips should easily be enough for the game, most likely you will not need more than 100 $1 chips, 100 $5 chips, and 50 $25 chips. As a last resort, you might even use real coins as play money, 1 "real" cent translates into $1 in the game.)

Rolling Stock Stars is a card game, so there are obviously cards, 131 of them. Let's look at them in detail.

1.2.1 Player order cards

TODO: Add figure "player order cards".

There are 6 *player order cards*. They are used to randomly determine the initial player order and later track the player order throughout the game.

1.2.2 Company cards

TODO: Add figure "company cards".

TODO: Adjust to actual layout of company cards.

The 36 *company cards* are the core of the game. They come in five colors. To assist color-blind players, each color has a geometric shape assigned to it: Red (●), orange (▲), yellow (■), green (⬠), blue (⬭).

Each company has a unique face value, printed in the upper left corner. The face value is used when calculating the wealth of a player at the end of the game (see section 1.9). It is also the mimimum bid in auctions (see section 1.4.1), and since it is unique, it can be used to identify the company (like a serial number).

The numbers printed in parentheses to the right of the face value define the price span the company can be sold for to corporations. Just beneath the face value, there are a number of stars (one to five), which are used to determine share price changes of a corporation (section 1.5.6).

In the upper right corner, you'll find a circle with a "+$" amount. This is the income of of the company. In the middle between the face value and the income, you can see the name of the company and its abbreviation. Name, abbreviation, and face value are each unique. So you can refer to the *Société nationale des chemins de fer français* as "the Société nationale des chemins de fer français" or "the SNCF" or "the 24". Whatever you like most. The colorful boxes on the company card tell you something about the possible synergies with other companies. They will be explained later (section 1.5.5).

The back of each company card shows a *cost of ownership* (starting from no cost up to $4). The cost of ownership printed on the back of a company card has nothing to do with the cost of ownership of the company described on the face of the same card. When you set up the game, you will build a deck of face-down company cards. The back of the top-most card in that deck determines the current cost of ownership applying to all companies whose color matches one of the colors in the central rectangle on the back of the card. A more detailed explanation of the cost of ownership will follow later (section 1.6.5).

1.2.3 Game end card

TODO: Add figure "game end card".

The colorful card that have a cost of ownership on both sides is the *game end card* ($7 and $10). The game end card is used as the bottom-most card of the company card deck.

1.2.4 Symbol cards

TODO: Add figure "symbol cards".

There are 8 *symbol cards*. Each features the symbol, name, and color of a corporation in a central box, together with the text "All X Shares Issued" (where X is a number between 4 and 7). A symbol card is the central component of the corresponding corporation. Its shares (see below) are put into the central box. The money it owns is placed right of the symbol card, and its share price card (see below) to the left. In a horizontal row below the symbol card, you line up all the companies the corporation owns as *subsidiaries* (which might be as few as one).

1.2.5 Share cards

TODO: Add figure "share cards".

There are 44 share cards, between 4 and 7 for each corporation. The shares are represented as smaller cards, featuring the symbol and color of the respective corporation. The shares are numbered, with the 1st share marked as the *president's* share.

1.2.6 Share price cards

TODO: Add figure "share price cards".

There are 27 white share price cards. These cards are used to mark the current price of each share of a corporation. They show the share price in the center. Left of the share price, some share price cards feature an IPO box. Right of the share price, you'll find another box showing you the maximum payout per share. The upper left and upper right corner show the two next lower or next higher share prices, respectively. The list cross-referencing numbers of shares with numbers of stars is used for share price adjustments, as explained later.

1.2.7 Receivership cards

TODO: Add figure "receivership card".

There are 8 cards titled *corporation in receivership*. They are used to mark corporations that are in receivership and contain a rule summary how those corporations act in the various phases of a turn.

1.2.8 Foreign investor card

TODO: Add figure "foreign investor card".

Finally there is the *foreign investor*. The card contains quite a lot of text, explaining the actions of the foreign investor, a kind of dummy player. The card is also used to arrange the assets of the foreign investor, similar to the symbol card of corporations. Its money goes to the right of the card, its companies in a horizontal row below it.

The rules will often prompt you to "turn a card vertically" or to "turn a card back horizontally". The standard (and "default") orientation of a card is called "horizontal" (i. e. if the rules don't state anything else, a card is oriented horizontally). If you turn the card

by 90 degrees, its orientation is called "vertical". Vertical orientation marks a special state of a card and is mentioned explicitly in the rules wherever it applies. (Note that the player order cards are printed in "portrait" orientation rather than the usual "landscape" orientation. Still their normal orientation is referred to as "horizontal" and their "special" orientation as "vertical".)

1.3 Setting up the game

Set up the game following these steps:

1. Each player should have a turn summary handy throughout the game.

2. Place the money in a central position on the table, easily reachable for everybody. This central area is the *bank*. Initially, it contains all the money in the game, but later, it will also contain shares.

3. Give each player \$30 from the bank. *Exception:* In a six-player game, each player receives only \$25.

4. Pick the player order cards corresponding to the number of players. Return the remaining cards to the box. Shuffle the player order cards and deal one random card to each player. The players reveal their cards, which define the initial player order. You don't need to change seating order as the player order will change often throughout the game.

5. Set the eight symbol cards aside, separately. On top of each symbol card, into the central box, place the shares of the corresponding corporation. Sort the shares, with the 1st share on top.

6. In another area of the table, lay out the 27 share price cards in a long, sorted row, starting with \$0 and ending with \$75. Most tables will not be long enough for this row. Feel free to break the row, e. g. into three rows of nine cards each. But keep in mind that it is effectively still one long row.

7. Pick one player who will be in charge of executing the actions of the foreign investor. (There are no decisions involved. That player only has to make sure that those actions are executed according to the rules and not forgotten.) Place the foreign investor card in reach of that player. Place \$4 (from the bank) into the treasury of the foreign investor (i. e. to the right of the foreign investor card).

8. In the following steps, you'll build the company deck. Start with the game end card. Place it on the table where it is easily visible for all players (somewhere next to the bank). Turn the face with the lower cost of ownership (\$7) up.

9. Sort the company cards by color and set aside the company with the highest face value of each color. That is the CDG (60) for blue, the E (43) for green, the DR (29) for yellow, the PR (19) for orange, and the MHE (8) for red.

10. Shuffle each remaining pile of companies of the same color.

11. Without looking at them, draw a number of companies from each pile that is equal to the number of players. *Exceptions: With 4 players, draw 5 orange companies. With 5 players, draw 7 orange companies. With 6 players, simply use all companies of all colors.* Keep the drawn companies separated by color.

12. Return the remaining companies to the box, again without looking at them.

13. Shuffle each of the set-aside companies into the pile of drawn companies of the same color.

14. Now build the deck by placing the blue companies on top of the game end card, then the green companies on top of the blue companies, then the yellow on top of green, then the orange on top of yellow, and finally the red on top of orange.

15. From the deck, draw and reveal a number of company cards equal to the number of players. Place them next to the deck. These companies are now in the *offering*. They are all available for auctions in the first turn of the game.

You are all set to start the first turn of the game.
TODO: Add figure "set up".

1.4 The first turn

Each turn runs through nine phases (although in some turns, nothing might happen in particular phases). Refer to the turn summary to get an overview. The right-most column of the turn summary indicates who makes decisions in a particular phase: *PRIV* means that the players act as private investors. *CORP* means that the players act as presidents of the corporations. (The president of a corporation is the player that currently holds the president's share of that corporation.) *AUTO* means that no decisions are required. The game "plays itself" in those phases.

1.4.1 Phase 1 – Investment

In current player order, starting with position 1, each player performs exactly one action. However, the player order is cyclic, so after the player last in player order has taken their action, loop back to player 1, who

will now take exactly one action again. Proceed with player 2, and so on. Repeat this cycle until you meet the end condition described below.

In turn 1, the only actions available are *pass* and *start an auction*. (The share trading part of this phase is still missing in turn 1.)

Pass is a very simple action: If you take that action, you (basically) do nothing. As a reminder that your last action was *pass*, you turn your player order card vertically. Passing does not prevent you from taking a different action next time you are up. If you take an action different from *pass*, but you have passed before, turn your player order card back horizontally.

If at any time during this phase, all player order cards are turned vertically, the phase immediately ends. In other words, the phase ends once all players have passed consecutively. Even if passing itself does not prevent you from taking another action next time you are up (see above), the phase might end before you have the opportunity to do so (which happens if everybody else passes, too).

Start an auction is the other possible action. If you take that action, you pick one of the companies available for auction. You place a bid at least as high as the face value of that company. If you don't have enough money to do so, or if there is no company available for auction, you cannot take this action. Once you have placed your bid, the next player in player order either raises the bid by at least $1 or leaves the auction. Then the next player does the same, and so on. Remember that the player order is cyclic, so after the last player in player order has raised the bid or left the auction, the player at position 1 is up to either raise the bid or leave the auction. This cycle continues until all players but one have left the auction. The remaining player pays their bid to the bank and places the company card in front of them. A player's bid must not exceed the money the player owns (but it may exceed the price range printed on the company card as that range is only relevant for acquisitions in phase 3). Players that have left the auction are skipped for the remainder of that auction. They are not allowed to re-enter that same auction.

Once the auction is over, a new company card is drawn and placed face-up into the offering of companies. However, the newly drawn card is not available for auctions during the same phase it is drawn. Turn the company card vertically to mark it as unavailable. In the first few turns of the game, it is very common that at some point during this phase all the companies in the offering are not available for auctions so that players cannot start more auctions.

The player that takes the next action after the auction is the one next in player order after the player who *started the auction* (*not* after the player who won the auction).

Example of a complete auction: Alice, Bob, and Chris play a three-player game. They have already reached turn 2. (The auctions in turn 1 are less interesting, so this example is taken from turn 2. The rules are exactly the same.) The current player order is Alice: 1, Bob: 2, Chris: 3. Alice has $20, Bob $12, Chris $9. The offering contains the MHE, the WT, and the MS. The WT has been drawn this turn, so it is oriented vertically. Bob is up to pick an action. He wants to start an auction. However, the WT is not available for auctions, and the MS is too expensive (minimum bid is $17 but Bob has only $12). The only company Bob could pick is the MHE. He does so and decides to place an initial bid of $9. $8 would have been a legal bid, too, but Bob wanted to kick Chris out of the auction from the start. Chris is next in player order but has only $9 so he cannot raise the bid and automatically leaves the auction. Next is Alice. She has enough money to raise the bid. She decides to raise the bid to $11. Now it's back to Bob. He would still be able to raise the bid to $12 but he thinks that $12 for the MHE is a bit too much. Furthermore, if he leaves now, Alice has won the auction and has to pay the $11 she has bid. After that, she won't have enough money to buy the MS, which she would have gotten for face value otherwise because no other player would have had enough money to overbid her. So Bob leaves the auction, Alice pays $11 and gets the MHE. A new company is drawn, the BD, which is placed into the offering, but turned vertically. The auction is over now, and the next player to take an action is Chris (because he is next in player order after Bob, who started the auction). Chris doesn't have enough money to start an auction. So he has to pass and turns his player order card vertically. In fact, the only company available for auctions is the MS, and none of the players have enough money left to bid for it, so all players have to pass, and the phase ends.

1.4.2 Phase 2 – Wrap-up

Redistribute player order cards according to remaining cash on hand. The player with the most cash left gets position 1, and so on. Break ties using the old player order. (In practice, you should first check if there are any ties, break them according to the current distribution of player order cards, and only then start to redistribute the player order cards.)

Example (continuing the example above): After the end of phase 3, both Alice and Chris have $9 left. Bob has $12 left. So Bob will be on position 1 in the new player order. Alice and Chris tie for position 2. Since Alice was before Chris in the old player order (1 vs. 3), she gets position 2, and Chris keeps position 3.

If there are any companies left that are available for auction, the foreign investor tries to buy them for face value directly (no auction triggered), starting with the company with the lowest face value and then continuing in ascending face value order. If the foreign investor has enough money for the company with the lowest face value, it pays it to the bank and adds the

company to its assets. (Place the company below the foreign investor card. If the foreign investor already owns companies, line them up in a horizontal row.) Then repeat with the company with the next lowest face value, and so on, until the foreign investor doesn't have enough money left.

Whenever the foreign investor buys a company, draw a new one from the deck as if that company had been purchased in an auction.

Usually, it takes a few turns before the foreign investor manages to buy a company. In practice, it is very rare that it buys more than one company in one turn.

After the foreign investor is done, turn all companies in the offering horizontally, so that they are available for auctions in phase 1 of the next turn.

1.4.3 Phase 3 – Acquisition

As there are no corporations in the game yet, nothing happens in this phase.

1.4.4 Phase 4 – Closing

In principle, you could close your freshly bought companies already, but it really wouldn't make any sense. So ignore this phase for now.

1.4.5 Phase 5 – Income

The bank pays income to all players and to the foreign investor. Each player adds the income of all their companies and collects the result from the bank. (The income of each company is printed in the circle in the upper right corner of the company card.)

The foreign investor does the same, but always earns an additional +$5 bonus, regardless of owning any companies (see the circle in the upper right corner of the foreign investor card). Add the foreign investor's income to its treasury to the right of the foreign investor card.

1.4.6 Phase 6 – Dividends

Only corporations pay dividends. As you probably have guessed by now, there are no corporations yet, so nothing happens.

1.4.7 Phase 7 – End card

Only once we approach the end of the game, something will happen in this phase. Ignore it for now.

1.4.8 Phase 8 – Issue shares

We are nearly there, but at the moment, we still have no corporations in the game. So once again, nothing to see here.

1.4.9 Phase 9 – IPO

Players that own private companies can decide to go public with one or more of them, i. e. convert them into *corporations*. Only companies owned by players can be converted into corporations (but not companies owned by the foreign investor or by already existing corporations). In descending face value order, the owners of the eligible companies decide if they want to go public or not. If they go public, the whole procedure is completed for that company before the owner of the next company decides.

Example: Alice owns the MS (face value $17) and the KME ($5). Bob owns the WT ($11) and the BPM ($7). Chris owns the BSE ($2). The first company that may go public is the MS. Alice has to decide first, and cannot revise her decision later during the same phase. Once she has decided if the MS goes public (and if so, has performed the required procedure), Bob decides for the WT and then for the BPM. After that, Alice decides for the KME, and finally Chris decides for the BSE.

The conversion procedure is the following:

1. Pick one of the symbol cards that is currently not in use. Together with the pile of shares on top, place it a bit away from your personal assets (it's going to be a *public* company after all) but still in your reach. (In the unlikely case that there is no unused symbol card available, your company cannot be converted. Sorry.) Note that each corporation has a different special ability, and a varying amount of shares to issue (from four to seven). We'll cover the special abilities later, when they become relevant.

2. Place the company that is being converted below the symbol card.

3. From the share price cards that are currently not in use, choose an eligible starting price for your corporation. The eligible share price cards are those that feature the color of the company being converted in their IPO box. Place the chosen share price card left of the symbol card. (That will leave an empty spot in the row of share price cards. Leave it alone, don't move the other share price cards to close the gap.) The share price card determines the current value of each share of the corporation. In turn 2, all privately owned companies are red, so the allowed starting share prices are $10, $11, $12, $13, and $14. However, in later turns, players will own differently colored companies, too, which changes the range of eligible starting share prices for those companies. (It is even possible that all eligible share price cards are in use by other corporations. In that case, your company cannot be converted. Sorry.)

4. Now take the first share from the stack of shares (which is the golden president's share) and place it in front of you. That's now your share, which you got in exchange for the company you went public with.

5. As the share you have received has a higher share price than the face value of the company you went public with, you have to pay the difference from your private money into the treasury of the corporation. Place the money to the right of the share price card. (If you don't have enough money to pay the difference, the whole procedure is void and has to be undone. If possible, you can choose a lower share price so that you have enough money to pay the difference between share price and face value of your company. But if not, you cannot convert your company. Sorry once more.)

6. The whole point of going public is to get public investors. So next, you place the second share from the stack into the bank. In return, the bank pays the share price into the treasury of the corporation. (This step is mandatory. You cannot opt to not give a share to the bank.)

TODO: Add figure illustrating the example below.

Example: You go public with the MHE ($8 face value). You pick the "Jupiter" corporation (which has a special ability that is especially helpful for the early red companies, we'll get to that later). As starting share price, you choose $11. You have to pay $3 into the treasury of your newly formed corporation. You receive the president's share of the Jupiter in return. The bank receives the second Jupiter share and pays $11 into the treasury of the corporation. Arrange all involved components as shown in the figure above. The Jupiter corporation consists of the $11 share price card, the Jupiter symbol card with the two remaining shares in the central box, the company card of the MHE, and $14 cash in its treasury.

1.5 The second turn

Congratulations. You have finished your first turn. The second turn is going to become a bit more interesting. Some of the phases won't be ignored any longer, and others get more complex.

1.5.1 Phase 1 – Investment

This phase works the same as in turn 1, but now we will add share trading to the mix. There are two more possible actions to chose from: *buy one share* and *sell one share*.

Only shares owned by the bank can be bought. (The pile of shares on top of the symbol cards cannot be touched in this phase.) If you choose the *buy one share* action, perform the following steps:

1. Take the desired share from the bank and place it in front of you.

2. Return the share price card of the corresponding corporation to its place in the row of share price cards and replace it by the next higher available share price card. (Usually, that is the next higher card as marked by the single arrow in the upper right corner of the share price card. **TODO: Adjust to actual card design.** However, if that share price card is in use, you will skip it. It is even possible that many consecutive share price cards are used and the share price of the share you are currently buying jumps up a lot.)

3. Now pay the *new* share price to the bank. (If you don't have enough money to do so, the whole action is void. Undo everything, and try something else.)

Now re-read the last item in that list and think about the consequences. Like in real share trading, the displayed share price of a corporation is not the price you have to pay if you want to buy one of the shares. It is more like the "last known share price". By buying a share, you are already modifying the system, and you have to pay more than that "last known share price".

After you have bought a share of a corporation you are not the president of, check if you now own more shares of that corporation than the current president. If that is the case, you have managed something like a hostile takeover. *You* are now the president of that corporation. Exchange the golden president's share with any one of your shares of the same corporation. (Shares are basically all the same. The numbering only matters as long as they are still on the stack on top of the symbol card. The golden president's share, however, is used as a marker for the current president. In all other regards, it's a perfectly normal share.)

If you choose the *sell one share* action, perform the following steps:

1. Choose one of your shares to sell and place it into the bank. (Only choose the golden president's share if it is the last share you own of that corporation.)

2. Return the share price card of the corresponding corporation to its place in the row of share price cards and replace it by the next lower available share price card. (Usually, that is the next lower card as marked by the single arrow in the upper left corner of the share price card. **TODO: Adjust to actual card design.** However, as before, you will skip missing share price cards.)

3. Now the bank pays you the *new* share price.

Similar to the situation when buying a share, the displayed share price is not the price you get paid. Like buying, selling a share modifies the system, so you get less money for a share than its "last known value".

Another similarity is that a change of presidency might occur after the transaction: If you are the current president, and you have sold a share, you have to

check if now another player (*not* the bank) owns more shares of that corporation than you. That player exchanges one of their shares of that corporation with the golden president's share (which might still be owned by you, or it is owned by the bank if you have just sold it as your last share of that corporation). In the case where more than one player is tied for the most shares, the player that is following you closer in player order becomes the president.

Example: The player order is Chris: 1, Alice: 2, Bob: 3. The "Eagle" corporation has currently three shares issued. (That cannot be the case in turn 2, only in later turns, you'll see.) Alice is the president and owns the golden president's share. Chris and Bob own each one of the other two shares. It's Alice's turn to take one action. She decides to sell one "Eagle" share, following the procedure above. After that, both, Chris and Bob own more shares each than Alice. As they are tied, the player order decides who becomes the new president. Alice is followed by Bob, and Bob is followed by Chris (remember, the player order is cyclic, the last player is followed by the first). So Bob is following Alice closer than Chris and becomes the new president. He takes the president's share from the bank and places his own share into the bank in exchange. Now Bob owns the president's share, and Chris and the bank own one share each. Alice no longer owns an "Eagle" share.

But what happens if you, as the president, sell your last share (the golden president's share), and *no other player* owns any shares of the corporation? Or in other words: What happens if the bank owns *all* issued shares of a corporation? In that special case, the corporation goes *into receivership*, which we'll cover in its own section 1.7 below.

1.5.2 Phase 2 – Wrap-up

This phase works exactly the same as in turn 1.

1.5.3 Phase 3 – Acquisition

In this phase, corporations may buy companies. Only corporations may buy, but they may buy from anybody: players, the foreign investor, and even other corporations (but not from the offering of companies available for auctions – those are indeed only available for players in phase 1, and for the foreign investor in phase 2). In phase 3, players and the foreign investor only *sell* companies, never buy.

This is the first time where the presidency of a corporation becomes relevant. The president of a corporation decides on behalf of the corporation. It might easily happen that both sides of a deal are actually controlled by the same player. If you (as a player) own a company and you are at the same time the president of a corporation, there is nothing wrong if you (as a player) agree with yourself (as the president of the corporation) that the corporation will buy your company for a price you agree on with yourself.

In every single transaction, exactly one company is bought. Buyer and seller have to agree on a price within the price span printed on the company card. (This price span is inclusive, e. g. the allowed prices for the KME ($5 face value) are $3, $4, $5, $6, and $7.) The buying corporation must be able to pay the price from its treasury. (You cannot pay with other means, or buy "bundles". It's always one company for an allowed amount of cash.)

Any number of transactions might happen during the phase, in any desired order, even concurrently. Think of a marketplace. Buyers and sellers find each other at will, by announcing their offers to whomever they want, negotiating in all directions. And once a buyer and a seller agree on a deal, they make it happen. The phase goes on until no transactions are happening any longer. There are some restrictions, though:

- Every $ and every company may only be part of one single transaction in the whole phase. The money that has been paid is turned vertically, as well as the company that has been handed over, to mark those components as "in flight". They cannot be part of another transaction in the same phase. Once the phase is over, you can turn them all horizontally again. They have "arrived" by then and can be used normally. (If you use poker chips, you'll find it hard to recognize chips that have been "turned vertically". Instead, place the chips used in a transaction on top of the stack of unissued shares.)
- At any time, each corporation must own at least one subsidiary company. You can never completely "empty" a corporation. This one company might very well be a company turned vertically, i. e. a corporation that owns only one subsidiary company in the beginning of the phase could first buy another company (which is thereby turned vertically) and then sell the company it originally owned. There is no hierarchy of subsidiary companies within a corporations. The company a corporation owned when it was formed has no special status within the corporation.

A special case is the foreign investor, as nobody controls it and its decisions. The foreign investor will happily sell any company it owns, but only for the maximum allowed price. The money it receives if it sells a company goes into its treasury and is available to be used in phase 2 of later turns. There might still be an ambiguous situation if more than one corporation want to buy the same company from the foreign investor. In that case, the corporation with the higher share price card has priority. In practice, whenever a corporation wants to buy a company from the foreign investor, its president has to announce the intention. At that time, pause the game for a short while and ask

each president of a corporation with a higher share price if they want to intervene and buy that company immediately themself. If more than one corporation wants to intervene, again the one with higher share price has priority. If no corporation intervenes, the announcing corporation *must* now buy the company (i. e. no fake announcements allowed).

TODO: Perhaps put this paragraph in its own box with corporation's logo. The special ability of the Orion corporation affects the interaction with the foreign invester. Orion always has first priority (as if its share price is higher than any other), and Orion only pays *face value* rather than the maximum allowed price.

1.5.4 Phase 4 – Closing

As in turn 1, it rarely makes sense to close companies so early in the game. Keep ignoring this phase.

1.5.5 Phase 5 – Income

For players and the foreign investor, this phase works exactly the same as in turn 1. The new thing is that corporations, too, collect income.

Their base income is calculated in the same way as for players and the foreign investor: Just add up all the income of the individual subsidiary companies of a corporation. However, corporations (and only corporations!) have the ability to generate bonus income from *synergies*:

A pair of companies that are subsidiaries of the same corporation and have each other's abbreviation printed in one of their synergy boxes, generates the bonus income printed in the upper left corner of the synergy box. All pairs you can find within a corporation generate bonus income, but each pair generates the bonus only once. Use synergy markers to track the bonuses. For each pair, place a corresponding synergy marker on the company card of the company with the higher face value. Place it on top of the abbreviation of the other company. (There is a bold red or yellow line in each synergy box. You will see that the markers are only placed *in front of* that line, never behind. Never place markers behind the line (on the abbreviations of companies with higher face value) to avoid double-counting of bonuses.) To easily find all existing pairs, sort the companies in descending face value order from left to right. Then start with the left-most company and check all the companies listed in its synergy boxes until you hit the bold line. No need to check behind the line. Then repeat the procedure with the second left-most company etc. You only ever have to look to the right. The companies left of the one you are checking have already been checked. So you have to look at fewer and fewer companies. The right-most company will never receive a synergy token.

Certain corporations have special abilities to generate additional bonus income.

TODO: Perhaps put this paragraph in its own box with corporation's logo. The Jupiter corporation receives +1$ for each company it owns.

TODO: Perhaps put this paragraph in its own box with corporation's logo. The Saturn corporation doubles the printed income of its best company.

TODO: Perhaps put this paragraph in its own box with corporation's logo. The Horse corporation receives +1$ for every two synergy markers it owns (rounded down).

The bank pays the total income of a corporation (base income plus synergy bonuses) into its treasury. For large corporations, it makes sense to track the income on a sheet of paper so that you don't have to calculate the total income again each turn.

TODO: Add figure illustrating the example below.

Example: The Horse corporation in the figure above consists of the DSB, the MS, the BPM, and the BSE. Its base income is $5 + $3 + $2 + $1 = $11. The DSB pairs with the MS, yielding +$2. The MS pairs with both, the BPM and the BSE, for +$1 each. Finally, the BPM pairs with the BSE for +$1. The synergies add up to +$5 (note the synergy markers). Finally, the special ability grants another +$2 income for four synergy markers. Thus, the total income is $11 + $5 + $2 = $18.

You can see here how the synergies model a network: Both the BPM and the BSE historically started in Berlin. The MS is the state railroad of Mecklenburg, a German state north of and not far from Berlin. So it connects to the two Berliner railroad companies. The DSB, in turn, is the state railroad of Denmark, which is north of Germany, and relatively close to Mecklenburg. So MS and DSB can connect their networks for mutual benefit. The Horse corporation has developed into an international northern European railroad trust.

1.5.6 Phase 6 – Dividends

Starting with the corporation with the highest share price card, and then continuing in descending share price order, each corporation pays a dividend (which is chosen by the president and can be as low as $0) and then adjusts its share price.

For each corporation, the president performs the following steps:

1. The top card of the stack of shares on your symbol card (or the symbol card itself if all stacks have been issued) tells you how many shares you have issued. You will have to pay dividends to each of those shares. So keep that number in mind.

2. On your share price card, you see the maximum possible dividend per share. Obviously, the corporation's treasury must have enough money to pay the dividends. If you have three shares issued and $8 in the treasury, the maximum dividend per share is $2, even if the share price card allows more. The minimum dividend is $0 (you can call that "not paying a dividend", it doesn't make a difference). Pick a dividend in this range, and pay it from the corporation's treasury to the owner of each share (which might be yourself (this time as a player, not a president), another player, or the bank).

3. Now count the "stars" of the corporation: Add the number of stars you see on each company card owned by the corporation. Every full $10 in cash adds another star. **TODO: Replace the word *star* by the star symbol? If play money exists, mention the star symbol on the notes, and that smaller change still provides a star for each $10 it ads up to.**

4. Take your share price card and look at the bottom half. Find the number of stars corresponding to the number of issued shares and compare it to the number of stars you have just counted to find your new share price card. If the two numbers are equal, nothing happens and you keep your old share price card. If you have counted one fewer star than printed on the share price card, your new share price card is "one down", i.e. it is the share price next to the single left arrow in the upper left corner of the share price card. Correspondingly, if you have counted one more star than printed on the share price card, your new share price card is "one up", i.e. it is the share price next to the single right arrow in the upper right corner of the share price card. If you have counted two *or more* stars fewer or more than printed on the share price card, your new share price is "double down" or "double up", respectively, i.e. it is the share price next to the corresponding double arrow in the upper left or right corner, respectively. Return your old share price card to its spot in the row of share price cards and take your new share price card from the row. If your new share price card is currently in use by another corporation, find the next available share price card in the direction of the arrow.

5. Turn your new share price card vertically (to mark that you have gone through this whole procedure). Should you have kept your old share price card, still turn it vertically.

TODO: Add figure illustrating the example below.

Example: Imagine the same corporation as in the previous example (section 1.5.5). It has three shares issued, a current share price of $22, and after paying dividends, it has $21 left in treasury. Its "star count" is therefore 3 (for the DSB) + 2 (for the MS) + 1 (for the BPM) + 1 (for the BSE) + 2 (for $21 cash) = 9. With three shares issued, the share price card asks for 7 stars. Since you have counted two more, the new share price is $27, as marked in the upper right corner next to the double arrow. If the $27 share price card is not available, the next higher available share price card must be taken. Note that the location of the $24 share price card doesn't matter here. A "double up" doesn't mean to go up two available share price cards. Always find the target share price first, and then start to "leapfrog" up or down from there on. (If the corporation had only $2 less cash, its star count would be 8, and the new share price would be only $24. If the corporations had less than $10 cash, its star count would be only 7, and the share price would stay the same.)

TODO: Perhaps put this paragraph in its own box with corporation's logo. The Star corporation alway adds two additional stars to its star count.

1.5.7 Phase 7 – End card

We are still not close enough to the end of the game to make anything happen in this phase. Keep ignoring it.

1.5.8 Phase 8 – Issue shares

Finally, corporations have the opportunity to issue new shares. After going public, this is the only phase where the stack of shares on the symbol card is touched and more shares enter the market.

Again in decreasing share price order (starting with the corporation with the highest share price card), the president of each corporation decides if the corporation issues one share or no share. (A corporation cannot issue more than one share in this phase.) In any case, the share price card is turned horizontally to mark that the corporation already had the opportunity to issue a share.

Issuing a share works very similarly to selling a share. Perform the following steps for the corporation that issues a share:

1. Place the top-most share from the pile of unissued shares on the corporation's symbol card into the bank. (If there are no shares left, i. e. all shares have already been issued, you cannot issue more shares. Sorry.)

2. Return the corporation's share price card to its place in the row of share price cards and replace it with the next lower available share price card. (Usually, that is the next lower card as marked by the single arrow in the upper left corner of the share price card. **TODO: Adjust to actual card design.** However, as before, you will skip missing share price cards.)

3. Now the bank pays the *new* share price into the corporation's treasury.

Later in the game, it is possible that the share price card the corporation has to take is the $0 one. In that case, the corporation is declared bankrupt and removed from the game. Follow the instructions on the $0 share price card. Note that shares and symbol cards are "recycled", i. e. they may later be used to form new corporations. However, the "recycled" shares have nothing to do with the old bankrupt corporation. The bankrupt corporation is gone for good, without compensation.

TODO: Perhaps put this paragraph in its own box with corporation's logo. When the Eagle corporation issues a share, its share price does not change. It simply receives the current share price from the bank after placing a share into the bank pool.

1.5.9 Phase 9 – IPO

In general, this phase works the same as in turn 1. However, with the more valuable companies that have entered the game by now, you will sooner or later go public with a company whose face value matches or even exceeds the initial share price. In case the share price matches the face value, you simply don't have to pay anything into the corporation's treasury. The share you get has precisely the value of the company you have given up, so you are all set. But what if the share price is lower than the face value of the company going public? Very simple: Take *two* shares rather than one. Start with the president's share, and then take an additional share. After that, pay the difference between the *doubled share price* and the face value of the company into the treasury of the corporation as usual. In this case, you also put two shares into the bank pool. Of course, the bank now pays twice the share price into the corporation's treasury. You always end up with half of the issued shares in your possession and the the other half in the bank.

Example 1: You go public with the BY (face value $12). You choose a share price of $12. You receive one share (the president's share) and pay nothing. The bank gets another share and pays $12 into the treasury of the new corporation. The corporation ends up with two shares issued and $12 in its treasury.

Example 2: You go public with the BY (face value $12). You choose a share price of $11. You take the president's share, but its value is not sufficient to match the face value of the BD. So you take another share. Now you have two shares with a total value of $22. You pay $10 from your cash into the treasury of the new corporation. The bank gets two shares, too, and pays $22 into the treasury. The corporation ends up with four shares issued and $32 in its treasury.

Example 3: You go public with the CDG (face value $60). You choose a share price of $30 (a share price that is only allowed for green and blue companies, but fortunately the CDG is a blue company). You take two shares. Their value matches the face value of the CDG, so you don't have to pay anything. The bank gets two shares, too, and pays $60. The corporation ends up with four shares issued and $60 in its treasury.

1.6 The remaining turns

We are almost there. You only have to learn a few more things, which only become relevant later in the game.

1.6.1 Phase 1 – Investment

Nothing really changes here compared to previous turns. However, we have to deal with a few special cases:

- After selling a share, the new share price might be $0. In that case, the corporation is bankrupt and the same procedure is triggered as described in section 1.5.8.

- After buying a share, the new share price might be $75. In that case, the game ends after the buy action has been completed (i. e. you still have to pay the $75 for the share you have just bought, but after that, the game is over). Read on in section 1.9 to learn how to determine the winner.

- Eventually, the deck of companies will run out. The last card in the deck is the game end card. It is never drawn and just stays where it is. If you cannot draw a company after an auction, just skip that step. The offering will contain one fewer company whenever that happens.

- Eventually, there will be no companies left in the offering. From that point on, the action *start an auction* cannot be chosen any longer.

1.6.2 Phase 2 – Wrap-up

This phase works exactly the same as in previous turns throughout the game.

For convenience, you can stop tracking the money of the foreign investor once there are no companies in the offering anymore.

1.6.3 Phase 3 – Acquisition

This phase works exactly the same as in turn 2 throughout the game.

1.6.4 Phase 4 – Closing

As you will see in the next section, later in the game, a *cost of ownership* will apply to certain companies. You might find yourself (or your corporation) in a situation where you want to get rid of one or more companies. In this phase, you can remove any number of your privately owned companies from the game. Essentially, you can do the same for the companies owned by corporations you control. However, a corporation has to retain at least one subsidiary company at any time.

If your total income from your privately owned companies in the following phase 5 (see section 1.6.5) will be negative and you don't have enough money to pay for it, you *must* close enough companies in this phase to be able to pay for your losses (or get rid of the losses altogether). In other words: As a player, you cannot drive yourself into bankruptcy.

As in phase 3, the players act in no particular order. They simply close companies as they see fit, and once nobody wishes to close a company any longer, the phase ends.

The foreign investor automatically closes any companies with a negative income (to be vetted separately for each company).

TODO: Perhaps put this paragraph in its own box with corporation's logo. Whenever the Ship corporation closes a company, it immediately receives twice the printed income of that company as a scrapping bonus.

1.6.5 Phase 5 – Income

The income calculation works the same as before, but at some point in the game, you will have to deduct a *cost of ownership*. Refer to the back of the top-most card of the deck of (not yet drawn) companies. Starting with the green cards, it will show a central rectangle with a cost of ownership. Each company matching any of the colors in the rectangle suffers the cost of ownership printed on the card, i. e. its income is reduced, possibly becoming negative. Each player and each corporation first add up the income of all their companies, and only then they receive or pay the total income (if it is positive or negative, respectively). A player will always be able to pay their negative income (because they were required to close companies to make sure of that, see section 1.6.4). However, a corporation might not be able to pay its negative income. In that case, it goes bankrupt. Treat it the same as if it has just reached share price \$0 (see section 1.5.8).

Once all company cards have been drawn from the deck, the game end card is visible. With regard to cost of ownership, it is treated the same as the central rectangle on the company cards.

TODO: Add figure illustrating the example below.

Example: Look at the same corporation as used in the example in section 1.5.5. We calculated an income of \$18. That was without cost of ownership yet. If the top face-down card of the deck is a green one (see figure above), each red company has a cost of ownership of \$2. Our corporation would earn \$2 less per red company it owns. So it would earn \$4 less, its income would be \$14. Once the top-most company of the deck is a blue one, each red and orange company earns \$4 less. The Horse would only earn \$18 – 3\$4 = \$6. Its president might be tempted to close the two red companies. Let's do the math: After that, the Horse would only own the DSB and the MS. That's \$5 + \$3 base income, \$2 for the synergy between the two, nothing anymore for the Horse's special ability (only one marker doesn't make a dent), and finally a deduction of \$4 cost of ownership for the orange MS. Again, we arrive at \$6 total income. Since closing the red companies reduces the star count of the Horse, it's usually a better deal to not close them yet.*

TODO: Add figure game-end-card front.

Once all companies have been drawn, the front-side of the game ending card is visible (see figure above). From now on, each yellow, orange, and red company has a cost of ownership of \$7. Our Horse corporation would earn 4\$7 = \$28 less than the unmodified income. In total, it now makes \$10 losses. Even if it closed all but the best company (DSB), it would still make \$2 losses per turn.*

TODO: Add figure game-end-card back.

In the last turn of the game (see section 1.6.7 below), the game end card will be flipped, and the cost of ownership will not only be much higher, it will even affect green companies. (Luckily, it will only last one turn.)

TODO: Perhaps put this paragraph in its own box with corporation's logo. The Bear corporation reduces its cost of ownership by up to \$10 (but not below \$0).

1.6.6 Phase 6 – Dividends

Once more, nothing really changes here compared to previous turns, but eventually, you might run into one of the following special cases:

- After adjusting the share price, the new share price might be \$0. In that case, the corporation goes bankrupt and the same procedure is triggered as described in section 1.5.8. (Note that

paying dividends happens first. It's perfectly legal to pay a dividend only to drop to $0 and go bankrupt right after that.)

- After adjusting the share price, the new share price might be $75. In that case, the game does *not* end immediately. The phase continues, and only in the subsequent phase 7 the game will be declared over. Should it happen that other corporations reach $75, too, those companies don't take a new share price card. They only return their old one. The shares of a corporation without a share price card have a share price of $75.

1.6.7 Phase 7 – End card

Eventually, something will happen in this phase.

First you have to check if the $75 share price card is held by a company. If so, the game ends immediately. Read on in section 1.9 to learn how to determine the winner.

If the $75 share price card is not in use, check if there are still companies available for auctions in the offering. If not, flip the game end card (which will increase the cost of ownership). Once you reach phase 7 again, the game ends. (In other words: If at the start of phase 7, the game end card is already flipped, the game ends in the same way as if the $75 share price card were in use.) Again, section 1.9 tells you how to determine the winner.

While the game end card is flipped (i. e. during the last turn of the game), the game might still end in phase 1 as described in section 1.6.1.

1.6.8 Phase 8 – Issue shares

This phase works exactly the same as in previous turns throughout the game.

1.6.9 Phase 9 – IPO

This phase works exactly the same as in previous turns throughout the game.

1.7 Receivership

TODO: Put this into a box rather than a section?

For as long as all issued shares of a corporation are owned by the bank, that corporation is *in receivership*. As a reminder, place one of the red receivership cards next to the corporation's assets. The card also lists the rules that now apply to the corporation. Essentially, the corporation is now run by a receiver (who is not always acting very smart). The rules in a bit more detail than on the receivership card:

Phase 1: The first player that buys a share of an corporation in receivership must pick the golden president's share and immediately becomes the new president, thereby ending receivership.

Phase 3: Corporations in receivership are very eager to buy from the foreign investor. However, in most cases, they don't have enough cash. In practical terms, you should check at the beginning of phase 3 if any corporation in receivership is able to buy a company from the foreign investor at all. If that's the case, start with the most expensive eligible company and pretend that the receiver has just announced the intention to buy the company. Then follow the usual rules of intervention and priorities (including the special ability of the Orion corporation). Repeat with the less expensive companies until no companies are eligible anymore.

Phase 4: Similar to the foreign investor, the receiver tries to close companies that make losses. However, since synergies might be generated by corporations, even in receivership, only close red companies if the cost of ownership is at least $4 per company, and only close orange companies if the cost of ownership is at least $7 per company. Never close yellow, green, or blue companies. If the corporation needed to close *all* its companies, keep the one with the highest face value. (Note that this rule won't always do the "right" thing. Companies might be closet that are still profitable, and unprofitable companies might stay open. As said, the receiver is not very smart.)

Phase 5: A corporation in receivership may go bankrupt as normal if it cannot pay for its negative income.

Phase 6: The dividend of a corporation in receivership is always $0.

Phase 8: A corporation in receivership will always issue a share if at all possible, even if it goes bankrupt by doing so.

1.8 How the game ends

As described above, there are three ways the game may end:

- If a corporation takes the $75 share price card during a *buy one share* action in phase 1, the game ends immediately after that action is completed.
- If the $75 share price card is in use during phase 7, the game ends.
- If phase 7 starts with the game end card already flipped, the game ends.

1.9 Who has won?

For the final ranking of players, add the value of everything each player owns:

- Their cash.
- The face value of each private company they own.
- The current share price of each share they own.

For the final player ranking, it is irrelevant how much cash and which companies the corporations own.

If there is a tie, break it by player order (lower number in player order wins over higher number).

1.10 Easily missed or misunderstood rules

The following list of things beginners often get wrong might prove helpful in your first couple of games. It is in approximate order of frequency, most common issues first.

- Synergies are only possible within a corporation. Companies owned directly by a player or by the foreign investor never ever receive synergy bonuses. When counting synergies, count every pair only once. If A synergizes with B, then B will always synergize with A, too. You still get the bonus only once.
- *Pass* and *leaving an auction* both happen during phase 1, but are entirely different things. *Pass* is an action you may take when it's your turn to perform one action. If you do that, you basically do nothing. If all players pass consecutively, phase 1 is over. But if any of the others take a non-pass action, you will have another turn, and when it's your turn again, you may (and must) choose a new action (which might be *pass* again, but any other legal action is eligible, too). In other words: Passing doesn't prevent you from taking another action later. In contrast, if you *leave an auction*, you have left the auction for good. You may not bid in the same auction ever again. Strictly speaking, *leaving an auction* is not an action at all. It happens as a sub-step during an auction, which is triggered by any player's *start an auction* action.
- After an auction, keep in mind that the last player that has performed an action is the player that has *started* the auction (*not* the player that has won the auction). So the next player performing an action will be the one next in player order to the player that has started the auction.
- Never transfer any assets (money, shares, companies) in a way not explicitly allowed by the rules. You can't sponsor your corporations, you can't "steal" from the treasury of your corporations, you can't give money or companies to other players, not even as a gift, etc. Keep all assets next to their respective owner (players, corporations, foreign investor, bank) and clearly separated from others.
- It is very tempting to think of the share price cards you see on the table as the price you have to pay to buy a share (or the price the bank will pay you if you sell a share). However, you have to pay the next higher available share price (and you will be paid the next lower available share price). You can see the next regular share prices in the corners of the share price cards next to the single arrows, but remember that cards that are already in use are skipped, so the relevant price may be even higher (or lower, in case you sell). **TODO: Adjust to actual share price card design.**
- Newly drawn companies are not available for auction in the same turn. They have to wait until next turn. (Even the foreign investor cannot buy them in phase 5 of the same turn.)
- Never ever use any $ or any company twice in phase 6. Don't forget to turn vertically the companies and the money used. Execute each transaction separately. Things like "The Bear buys MHE for $8 from the Eagle, and at the same time the Eagle buys the BPM from the Bear for $8, too, so we just swap companies and no money" don't work. First transfer one of the companies (let's say the MHE) and pay the money (and turn both vertically), then do the same with the other company (the BPM), pay the money (which must not be the money turned vertically), and turn them both vertically.
- The cost of ownership is defined solely by the back of the top-most card in the deck of unrevealed company cards (or, if the deck has run out, by the game end card left behind). Once a company card has been drawn, it will never be flipped back again and its back is irrelevant for the rest of the game.

Chapter 2

Notes for players of the original *Rolling Stock* or 18xx games

TODO: Vet if we want this chapter in the printed player's guide at all.

This chapter is for those that already have previous knowledge by having played the original *Rolling Stock* game and/or 18xx games. This knowledge can be extremely helpful when grasping *Rolling Stock Stars*, but there are also some caveats where you have to "unlearn" certain aspects of those games.

2.1 If you have played the original *Rolling Stock*...

...you are probably asking yourself now why you should play *Rolling Stock Stars* instead of (or even in addition to) the original game. There are two obvious, but radically different conclusions people might jump to: The one extreme is the notion of *Rolling Stock Stars* as an "improved" version of *Rolling Stock*: After years of experience with the original game, it was certainly time for a 2nd, more polished edition which quirks removed. The other extreme is the verdict of *Rolling Stock Stars* being a "streamlined", "more-forgiving", or even "watered-down" version of the original game. The former would make you prefer *Stars* over the original game in any case, while the latter would position *Stars* as a learning game, over which experienced players would prefer the original game.

In reality, it's not that easy. Both conclusions are not entirely wrong, but still more wrong than right. *Stars* would certainly not have been possible without the experience many players made with the original game. Also, *Stars* is indeed meant to be more approachable and less niche than the original game. Still, it would be wrong to generally think about one game as fundamentally "better" than the other, or as *Stars* being only meant for beginners or more casual players. Both games are much more different than the seemingly small differences would suggest. While there are experienced players preferring the original game over *Stars* (or vice versa!), some just claim that the games are too different to be ranked directly against each other.

TODO: Finish!

2.2 If you are an 18xx player...

...many concepts in *Rolling Stock Stars* will be familiar to you. However, there are a number of significant differences. The following list will help you to avoid the most common traps for 18xx players.

- Players start with $30 for every player count except 6. (Basically, instead of decreasing the money of each player, the game size is increased to accommodate more players.)
- Pay special attention to phases 3 and 4, which are performed in "any order". Don't wait until it's "your turn". Just act.
- In phase 1 (you might want to call it "share round"), you indeed have exactly and only one action whenever it is your turn. *Either* buy *or* sell *or* start an auction *or* pass. And if you sell, it's only ever *one* share per action.
- Otherwise, share trading has almost no restrictions compared to 18xx. There is no certificate limit. There is no limit of shares in the pool. There is no limit of shares an individual player may hold (may be 100 %). You may sell shares of a corporation that has just been founded. You may even buy shares you have sold before in the same phase. (Oh yes! But keep in mind the next item below. In other words: If you keep selling and buying the same share, you will lose money each time.)
- Every individual sell and buy action will modify the share price, and you will get/pay the *new* share price (see also the non-18xx-specific notes above).

- At the end of phase 1 (the "share round"), fully sold shares will *not* change their share price.
- There is no notion of a share being explicitly a "10 % share" or a "20 % share". Keep in mind that shares not yet issued basically don't exist. (After the IPO, the only way un-issued shares enter the game is by issuing shares in phase 8.) If a company has two shares issued, each is implicitly a 50 % share. If it has three shares issued, each is 33 %, and so on. Also note that the president's share is a single share, not a double share.
- There is no "emergency money raising". If your corporation has a negative net income and cannot pay for it, it goes bankrupt.
- You set a dividend per share and then pay it from treasury. The dividend you pay has no direct link to the income of your corporation in the same turn. Even if your corporation has a negative income, it may still pay dividends (if there is enough money left in the treasury). Furthermore, the share price adjustment is not directly coupled to the dividends you pay (despite this happening in the same phase 6). It is indirectly coupled (via the star count), but the effects are the opposite of what you would expect: In general, paying a dividend makes it more likely your share price will drop, while not paying a dividend (strictly speaking: paying a dividend of $0) makes it more likely your share price will increase.
- In a certain way, the companies in *Rolling Stock Stars* are a bit of both, privates and trains in 18xx. However, there is no upper limit of the number of subsidiary companies in a corporation (no "train limit"), and companies are never scrapped by force. (The latter is, however, not entirely alien to the 18xx world. *1873 Harzbahn* uses a very similar cost-of-ownership system.)
- Phase 4 (new player order) works exactly like in *1844: Switzerland*. If you know that game, nothing new here. Otherwise: It's basically a refined priority deal.
- The bank has unlimited money.

Chapter 3

Variants

The following introduces several possible variants.

TODO: Vet for each if we want it in the printed player's guide.

3.1 Deals and negotiation

TODO: Concern here is that this is mostly of general concern for many games of a similar type. It might not be worth it to put this into the printed player's guide where people would expect more specific information.

The rules are (intentionally) silent about deals and negotiations. Rules about deals and negotiations are a bit like rules about showing up on time to start the game or switching off your mobile phone while playing. Things are different for games with secret information, i. e. where some players have information others don't. In that case, you need rules about legal ways to share (or not to share) this information. But *Rolling Stock Stars* has no secret information. Of course, the order and composition of the deck has a random component, but no player knows more than any other.

So by default, players can just say whatever they want. Nothing is forbidden, but nothing is enforced either. Feel free to forge deals and alliances, but remember that the rules won't help you to enforce those deals. (I believe it is basically impossible to write consistent rules that would make freeform deals binding. Deals are too often worded ambiguously, or they can't be fulfilled without breaking the rules, or a player has agreed to multiple deals that are mutually exclusive.) There is little danger that *Rolling Stock* would degenerate into a *Diplomacy*-style backstabbing game, simply because long-term deals are rare and the short-term deals neither require nor foster a long-term partnership (if at all, those will implicitly emerge from overarching strategic goals, e.ġ. a single player is running away with the game so that the other players cooperate with each other more intensely to catch up – perhaps they will even manage to implement an embargo against the leading player). In JC Lawrence's words: Both sellers and buyers (in phase 3) are "naturally promiscuous".

Groups might have their own etiquette about deals and negotiations. Feel free to implement whatever you feel is right. However, I'd strongly discourage from secret negotiations. They would be a huge time drain, and I believe they are neither in the spirit of the game nor will players feel a great need for them.

In general, you should make sure that negotiations don't stall the game for too long. If you can't avoid spending an uncomfortable amount of time with negotiations and/or if you want to limit negotiations for other reasons, try one of the following more formalized variants:

- Strictly limit the time for the "any order" phases (e. g. two minutes for phase 3 and one minute for phase 4, feel free to use any value you see fit). In all "sequential" phases, players have to decide quickly and must not negotiate with other players when it's their turn to do something. At any other time, they may negotiate freely.

- Strictly limit negotiations to phase 3. (The more experienced players become, the more they will feel the need to plan in advance. The decision to issue a share in phase 8 or to form a corporation in phase 9 depends on future deals in phase 3 of the next turn. Players might be tempted to meticulously arrange all those deals for phase 3 as soon as in phase 8 or 9 of the previous turn, which might stall the game quite seriously.)

- The most radical solution is a strict "no deals, no negotiations" policy. In phase 3, offers and counter-offers can still be made, but without additional table-talk. The following will still be OK: "Do you want to buy the MAD for $50?" – "I'll give you $45." – "Let's say $47." – "Deal." Not OK would be any additional arguments along the lines: "I can't give you more than $45 because I still need these $12 left to buy the PR from Chris's Horse corp. Furthermore, the $45 are good enough for you because that will allow you to pay dividends and still rise in share price." This radical variant is most suitable for "blitz" games. You might manage a full

game in only 90 minutes. But keep in mind that "Rolling Stock Stars" is a very interactive game, and negotiations and deals are supposed to be part of the fun.

There is one specific type of situation where a certain type of players might create a sense of backstabbing.

Example: Alice is the president of the "Android" corporation, which owns the WT and the OL. Bob is the president of the "Bear" corporation, which owns the MS and the BY. Alice and Bob agree that they should "swap" the OL and the BY to get better synergies. Since a direct swap is not possible, what formally has to happen is two transactions: (1) The "Bear" buys the OL from the "Android". (2) The "Android" buys the BY from the "Bear". Alice and Bob agree to do both transactions for the minimum possible price of $7 (because both corporations are short of cash at the moment). The order of the transactions doesn't really matter, but you have to start somewhere. So Alice's "Android" hands over the OL to Bob's "Bear", and the "Bear" transfers $7 to the "Android". Alice wants to go on and to execute the second transaction, but in that moment, "all of a sudden", Bob has second thoughts and refuses. Alice feels backstabbed. Bob's behavior is completely legal, though. The rules don't enforce any connection between transactions.

If this kind of situation appears to be a problem in your games, you might want to introduce a variant rule that allows "complex" transactions where a number of individual transactions can be executed in one step (so that the kind of "second thoughts" Bob had in the example are rendered impossible). But make sure that the "complex" transaction would still be legal if executed in a series of individual transactions. It is still impossible to "swap" companies if the corporations don't have enough money to pay for their newly acquired companies, or if both corporations only own one company.

3.2 Secret private money

TODO: Concern here is what's written below anyway: If you don't forbid note taking, money is anyway trackable, even by players with weak memory.

In the rules, all assets are open for inspection. Some players, however, prefer to play with secret private money. (The treasury of corporations has to be open because the stars have to be counted in phase 6.) Feel free to do so as a variant, but keep in mind that the private money is perfectly trackable. If you allow players to take notes on paper (which is strongly encouraged to speed up the game), then tracking the private money of each player becomes merely a matter of diligence, and most players will probably argue you should simply play with open money to spare everybody the tedious tracking work. If you disallow notes (or only allow specific kind of notes), tracking private money becomes a brain exercise, which only some players consider fun. Others simply won't bother and leave it to their intuition, which will make auctions less predictable ("How much money will he have? How much do I have to bid to kick him out of the auction?"). Again, some players will consider that fun, others not. It's your call.

3.3 Open companies

Some players dislike the unpredictability of the deck. To solve that, you can play with an open deck. Build the deck as usual, but then declare it open for inspection. To facilitate inspection, you can turn all company cards face-up. In that case, you should use one each of the unused green and blue company cards to mark the current cost of ownership. (Once the top-most card of the deck is green, place the unused green company card face-down next to the deck. Correspondingly, do the same once the top-most card is blue.)

3.4 Two-player variant

TODO: I would either toss this out completely or make it "official" (so that we can label the box as *2 to 6 players*. I guess this needs more test games for the final call.

To play with two players, set up the game as if you were playing with four players. Then, each player takes the position of two players in the four-player game simultaneously. Player A starts with his simulated "right hand" player in player order position 1. Player B starts with his simulated "left hand" player in position 2 and his simulated "right hand" player in position 3. Finally, player A starts with his simulated "left hand" player in position 4.

Play the game normally, as if it were a four-player game. To win, your *lower ranked* simulated player must be better than the lower ranked simulated player of your opponent.

Example: Alice's "right hand" player ends up first in the final ranking with a huge margin, and her "left hand" player ends up on a close last place. Bob's simulated players end up on rank 2 and 3, very close to Alice's "left hand" player. Bob wins the game because his lower ranked player is better than Alice's lower ranked player.

Rolling Stock is full of win-win deals. Forging those deal between opponents isn't really interesting any longer in a two-player game, because there is no third (or forth or fifth) party any longer relative to which the two dealing players would win. While deals between opposing players are in theory still possible in the two-player variant, they would only happen if the two players had a different understanding of the benefits of the deal and were both thinking they were winning more than the other. Deals between "allied" simulated players are obviously highly encouraged, and

the two-player variant is very suited as an exercise for cooperative strategies. You even have to make sure that both simulated players benefit in a similar way because you can only win if you balance the result of your two simulated players. That's very similar to a real four-player game. (Of course, you can "switch camps" at any time in a real four-player game and forge deals "promiscuously" with changing partners, while the two camps are fixed in the two-player variant.)

Chapter 4

Overview of companies

TODO: I think we should have the list of companies for reference. Can be rather short. Question is if we also want the "flavor texts", which I have left in below to vet.

As an homage to the 18xx series of railroad games, games from that series that feature one or more of the companies represented in *Rolling Stock Stars* are mentioned here.

4.1 Red companies

The red companies are early Prussian railroad companies from the first half of the 19$^{\text{th}}$ century. The same six companies are represented as *Vorpreußen* in Michael Meier-Bachl's *1835* (with slightly different names, though). Some of the companies can also be found in other games: The MHE in Klaus Kiermeier's *1873 Harzbahn*, the BPM and the BSE in David Hecht's *18EU*, the BME and KME in Wolfram Janich's *18Rhl – Rhineland*, and the AKE in Wolfram Janich's *1842: Schleswig Holstein*.

4.2 Orange companies

The orange companies are the railroads of the various German states in the middle of the 19$^{\text{th}}$ century. Again, you will find the same companies (with slightly different names) in Michael Meier-Bachl's *1835*. In addition, David Hecht's *18EU* features the BY and the PR, and Wolfram Jahnich's *18SX* the SX. In *Rolling Stock Stars*, these companies start as private companies, in the 18xx games, they are corporations. Thus, the games somewhat misrepresent history, as all these companies were state-owned.

4.3 Yellow companies

The yellow tier of companies covers the late 19$^{\text{th}}$ and early 20$^{\text{th}}$ century. The DR is the state railroad of the now unified German Empire, while all the other yellow companies represent the railroad companies of the countries neighboring Germany. Again, these companies were mostly state-owned. Representing them as tradeable companies is once more bending history a bit. You can find many of these companies in David Hecht's games: The SNCF, B, DR, NS, and KK in *18EU*, the SNCF and B also in *1826*, and the DSB in *18Scan*. Leonhard Orgler's *1837* features the KK, as does Leonhard Orgler's and Helmut Ohley's *1824*. The SBB is the largest company in Peter Minder's and Helmut Ohley's *1844: Switzerland*.

4.4 Green companies

Historically, we are now moving deep into the 20$^{\text{th}}$ century. Geographically, we are expanding towards the periphery of Europe. Two companies are not strictly railroad companies: The E (representing the tunnel between Britain and France) and the BSR (a hypothetical company running the ferries, bridges and tunnels in the Baltic Sea). David Hecht's games feature two of the green companies: The FS in *18EU* and the SJ in *18Scan*.

4.5 Blue companies

The blue tier of companies contains no railroad companies at all, but the modern seaborne and airborne competitors. HA, HH, and HR are the three largest container ports in Europe. MAD, LHR, CDG, and FRA are the four largest European airports. Passengers and cargo have to reach the ports and airports, so those companies are not only competitors of the railroad companies but also offer some opportunities to synergize.

TODO: I have elided the credits. With the development of the game as it happened, I cannot really name "core" playtesters anymore, and listing them all (as in the original game) has become plainly

impossible. Depending on tast, we could add a disclaimer like this, and then just have a few special persons mentioned: Scott as the publisher/developer, Toby for the online version etc. But I feel it's probably better to skip the credits entirely and perhaps mention the online version in its own section somewhere in the beginning.