

Teacher guide SIERgame

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1. How large should teams be and how many worlds do I simulate per class?

Teams ideally consist of 4 people, but 3 or 5 is also possible.

In principle, the teacher can decide the number of teams per game (i.e. per world), with a maximum of 10 teams per game. So then there are 10 countries in 1 world. But if you have many students in a class (say 40), it makes more sense to simulate two worlds in one class with, say, 5 teams each (5 countries). Otherwise, the students' view of what is happening in the (numerous) foreign countries becomes too limited and it becomes too difficult to see which foreign country has had an impact on their own economy.

So that may imply playing two games (worlds) per class with a number of countries in each of those worlds. Those worlds are then separate (but the countries within each world are obviously not separate). Because you get multiple login names with a license, this means no extra cost.

Examples of good team divisions are:

class size	number of worlds (= number of games)	number of teams (= number of countries per world)	number of students per team
12	1	4	3
16	1	4	4
18	1	4	4 to 5
20	1	5	4
24	2	4	3
26	2	4	3 to 4
30	2	4	3 to 4
40	2	5	4

Which students do I place together?

When dividing students into teams, avoid having a team consisting of students with widely varying levels of economics knowledge, otherwise the better ones will dominate the weaker ones and the latter will learn little.

2. How do the teacher and players log into the SIERgame environment?

- a. Go to the following website: <https://siergame.nl>
- b. Click on "Login" in the upper right corner.
- c. A login block with three components will appear on your screen:
 - 1) "World name." Type in the username you received for the SIERgame from Tilburg University.
 - 2) "Choose your role in the game." As a teacher, select the "Moderator" option here. As a player belonging to country 1, select the option "Country 1", etc.
 - 3) "Password". You have received eleven passwords from Tilburg University: 1 for the teacher and 10 for the players. Please type the password relevant to you here.

Note: Students belonging to the same country can each log in on different computers with the same login information for that country. It is recommended to always submit the policy from the same computer.

3. How does the teacher set up a new game?

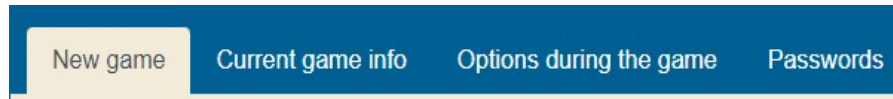
At the top of your screen you will see the following options:



The first option ("Moderator") is only visible to the teacher, the players only see the other options.

Click on the first option ("Moderator").

Then you will see a screen with four choices:



Choose "New Game" here.

Here you should indicate your game choices regarding:

- a. **"Level"**. Default here is "Real Economy - Basic." Using the arrow to the right of the window, you can select a different level. You can choose from seven levels:¹
 - 1) Real Economy - Introduction → this game contains no explicit monetary sector, the countries are closed economies.
 - 2) Real Economy - Basic → this game contains no explicit monetary sector, the countries have only trade relations, exchange rates are fixed but adjustable, private wages are determined by the government, but there is also the option to fully index private wages to the inflation of the previous period. This level is chosen by most high schools.
 - 3) Real Economy - Middle → as level 2), but private wages now also respond to unemployment in the previous period.
 - 4) Real Economy - Advanced → as level 2), but exchange rates are now flexible, players have the option to choose a fixed exchange rate.
 - 5) Monetary Economy - Basic → as level 2), but there is also a monetary sector without international capital movements.
 - 6) Monetary Economy - Middle → as level 5), but there is also international capital movement.
 - 7) Monetary Economy - Advanced → as level 6), but exchange rates are now flexible, players have the option to choose a fixed exchange rate.

¹ At this moment, only levels 1, 2, 3 and 6 can be played.

- b. **"Number of countries"**. Select the desired number of countries that make up the world in your game.
- c. **"Game language"**. Choose the language the players will see on their screen. One option is to let the players determine this. In this case, players can click on the language of their choice at the top right of their screen.
- d. **"Allow use of import tariffs"**. Choose here whether the players should get import tariffs as one of their tools. If you choose "Yes" you can set after which round of play the import tariffs are possible. This option's default is to allow import tariffs after playing round 2.
- e. **"Use timer"**. If you choose "Yes" here, the players and teacher will see the remaining time for a playing round at the bottom of their screen. See section 9 for further explanation of the timer.
- f. **"Players can adjust private sector wage levels"**. This option is on by default, in which case these wages are a policy tool. If you choose to turn this option off, then private sector wages will change with the inflation rate of the previous period (even if there is deflation: then these wages will decrease).
- g. **"Automatically compute the model after entering the policy impulses of all countries"**. This option is on by default, the model is then calculated as soon as all players have submitted their policies. If not, the teacher must manually indicate when the model should be calculated. See the next section of this manual for how to have it calculated manually.²
- h. **"Gold reserves"**. These are the initial gold and foreign exchange reserves of each of the countries. This level is by default equal 2 if there is no monetary sector (i.e. at game levels 1-4) and 7 if there is a monetary sector (i.e. at game levels 5-7). The latter because international capital mobility is usually chosen at the same time, which can lead to large balance of payments imbalances. If you increase these default values, players do not have to pay as much attention to whether their policies lead to a balance of payments deficit and depletion of their gold and foreign exchange reserves. In the event of such depletion, the players of the country in question will receive a "red card" (see below) and certain measures will be imposed.
- i. **"Critical level government surplus (yellow card)"**. This option is visible only if game level 4-7 is chosen. This level defaults to -2 or -9, but can be adjusted if desired. If a player's government deficit exceeds this critical value during the game, the player will receive a "yellow card," which means that certain measures will be imposed on the country in question.²
- j. **"Allowing countries to see graphs"**. This involves a graph showing why political support has changed, a graph relating to the goods market and (in the case of a monetary sector) a graph relating to the bonds market.²
- k. **"Show textual explanation to graphs"**. If you allow this, a text will be added to the graphs of the goods market and the bonds market indicating the main reason why the supply/demand curve has shifted.²

Once you have made your choices, press the "Initialize" button at the bottom of the screen. After that, the game can be played. Players can then log in.

When you create a new game, the data of a game that was previously played within this world will be deleted, even if the previous game was played at a different level. To save the data of a game you can download it after the game is finished (see section 5).

² You can change this option during the game. You do this by clicking on "Moderator" during the game and subsequently selecting "Options during the game".

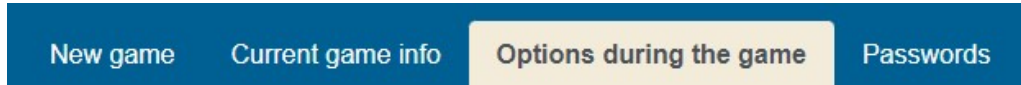
4. How can the teacher change options during a game?

At the top of your screen, you will see the following options:



Click on the first option ("Moderator").

Then you will see a screen with four choices:



Here, select "Options during the game."

Here you can then perform the following actions:

- a. **"Compute next period."** You should press here if you want the model to be calculated and you did not select "Calculate the model automatically after entry of last country's policies"
- b. **"Return to previous period"**. If players have apparently made a mistake, you can press here. This will erase all players' policies from the most recent round. All countries must then resubmit their policies. You can also use this option for a practice round, after which the game can be returned to the starting situation. There is no need for players to log in again.
- c. **"Allow use of import tariffs."** Didactically, it may be wise not to allow import tariffs at the beginning of the game, otherwise the players' focus will be mainly on international aspects. Then, if you do want to allow them after a few playing rounds, select "Yes" here. Of course, this is not necessary if you have already determined after which period import tariffs are allowed when creating the game, but you can change your previously implemented setting during the game.
- d. **"Use timer."** If you choose "Yes" here, the players and teacher will see the remaining time for this round at the bottom of their screen. See section 9 for further explanation of the timer.
- e. **"Calculate the model automatically after entry of last country's policies"**. You can enable or disable automatic calculation during the game. This is useful, for example, if you play the game over several days and do not want students to be able to submit policy impulses in between, which would then also be calculated.
- f. **"Show yellow card for critical level government surplus"**. This option is visible only if game level 4-7 is chosen. This level defaults to -2 or -9, but can be adjusted if desired. If a player's government deficit exceeds this critical value during the game, the player will receive a "yellow card," which means that certain measures will be imposed on the country in question.
- g. **"Allow countries to view graphs."** These include a graph explaining why political support has changed, a graph relating to the goods market and (in the case of a monetary sector) a graph relating to the bonds market (explaining interest rates).
- h. **"Allow showing textual explanation to graph."** If you allow this, a text will be added to the goods market graph and the bonds market graph indicating the main reason why the supply/demand curve has shifted.

- i. **"Policy boundaries."** All policy tools have upper and lower bounds for each round. Here you can change these bounds. Note that if policy bounds are chosen too broadly, this will increase the chance that the calculation gets stuck and the game will have to be reset one round. The advice is therefore not to expand these limits.

Press "Save" at the bottom to confirm your choices.

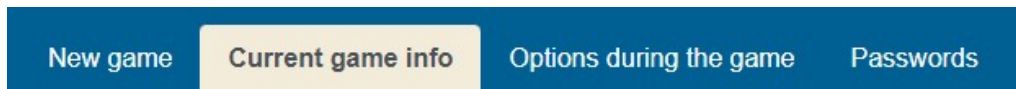
5. How can the teacher get an overview of his choices for the current game?

At the top of your screen, you will see the following options:



Click on the first option ("Moderator").

Then you will see a screen with four choices:



Choose the second option, "Current game info." Then you will see an overview of the choices you have made for the current game.

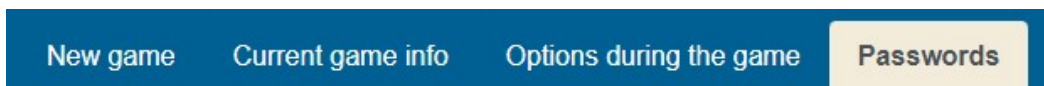
6. How can the teacher get an overview of all players' passwords?

At the top of your screen, you will see the following options:



Click on the first option ("Moderator").

Then you will see a screen with four choices:



Choose the fourth option, "Passwords." Then you will see an overview of the passwords of the countries of the current game.

7. Where can players request information and submit their policies?

At the top of their screen, players and the teacher will see the following options:



Clicking on the appropriate option will show them the following:

- a. **"Economic situation"**. By clicking here, the players and the teacher can see all economic data for all countries (including the policies all countries have adopted) and the "Political support" in all countries. By selecting another period in that screen at the top, they can also see these data for earlier periods.
- b. **"Policies"**. By clicking here, players can submit their policies for the next round. If the teacher clicks on this button on his computer, he can submit policies for one or more countries. As long as the calculation for the next period has not started, players can resubmit policies. In this case, the previously submitted policy will be overwritten.
- c. **"Graphs"**. If the teacher has chosen this option, by clicking here the players can see a graph showing them why "Political support" has risen or fallen, how the goods market has developed and (in the case of a monetary sector) how the bonds market has developed. If the teacher has allowed it, they are also shown a textual explanation of this. By selecting a different period or country number at the top of their screen, they can see the same information for the other countries and for the earlier periods. Even if the teacher has not allowed these options for the players, the teacher can still see these graphs and texts on his own screen.
- d. **"History"**. By clicking here, the players or the teacher can see how the economic situation has developed in each of the countries over the periods played up to that time.
- e. **"Download"**. When the players or the teacher click on this button, they can download an Excel file containing the data they want, for example to write a report. First they should indicate for which countries and/or periods the data should be downloaded. It is recommended to use the "Select all" option for this purpose. The data can be downloaded via the "Economic situation" tab, in which case the Excel file contains several tabs with the data of all countries per period. If the data are downloaded from the "History" tab, an Excel file with a tab for each country containing the data for all periods results.
The tab "Log" is only visible to the teacher. This allows a zip file to be downloaded with all policy impulses from all participating countries. These data can be used for replaying or debugging a game situation.

8. How can the teacher see which countries have submitted their policies and which have not yet?

At the bottom of the screen a box is visible for each country with the country number. As long as a country has not submitted a policy, the country number is visible. Once a country has submitted its policy, the country number is replaced by a check mark:



9. How to use the timer?

When creating a game (or while playing a game), you can choose to use a timer. This allows you to set the maximum time that players have to submit their policies per period.


The timer is visible at the bottom of the screen to all players and the teacher, the indicated time shows the number of minutes and seconds remaining for the current playing round:





The Moderator can turn the timer on, pause, stop and set a new time:



Setting a different time for the current playing round is done by entering the desired number of minutes and clicking on "Set". The new time will then be visible immediately.

Turning the timer on can be done by clicking the Play  button.

Pausing the timer can be done by clicking the Pause  button.

Stopping the timer can be done by clicking the Stop  button.

Once the timer is turned on, the remaining time will run down. Starting from a remaining time of 10 seconds, that number of seconds will be displayed in red. Once the remaining time is over, however, there will be no automatic calculation. In other words, there are no consequences built in for the players when they exceed the time limit. The teacher himself can urge the players to submit their policies soon and possibly start the calculation of the new period himself without all players having submitted their policies. During the game, the time remaining for the next playing round can be adjusted.

At the start of a new period, the timer automatically starts running again.

10. How do the teacher and players log out?

Logout can be done by clicking the down arrow in the upper right corner next to the world's name and then clicking Logout:

