LEVEL 4 OF 5 OF THE CAPITAL VALLEY GAME

Crisis and liquidity: living through a crash

Class	From higher education: vocational colleges, bachelor's programmes, business and engineering schools
Duration	1 session of 55 minutes
Prerequisites	Levels 1 to 3 finished and their reviews seen
Materials	A web browser. Nothing to install, no student account, no personal data collected.

A level runs for 12 turns, about 30 minutes of play, and covers a year in the life of an investor. This sheet covers level 4.

Place in the curriculum

Curriculum fit: **explaining financial crises and regulating the financial system** (bubbles, herd behaviour, panic, contagion; Grade 12 (US) / Year 13 (UK), ages 17-18). Also market failures (Grade 11 (US) / Year 12 (UK), ages 16-17), and personal wealth management in business and management programmes.

Concepts covered: the liquidity scale and the illiquidity premium, real assets and rental income, systemic risk and contagion, volatility, unrealised loss and realised loss, herd behaviour and loss aversion, return to fundamental value.

Objectives of the session

By the end of the session, students can:

1. Rank the game's investments from the easiest to get back to the most locked away, and explain why money that is locked away has to be paid better.
2. Describe how a market crisis unfolds: the signals, the panic, the general fall, and then a recovery with no news behind it.
3. Tell an unrealised loss from a realised one.
4. Explain why what holds up in a crisis is decided beforehand, through the allocation, and not while the crisis is happening.

How the game works

Each student looks after a virtual portfolio. Every turn brings one or two news items (official announcements, rumours and so on), an investment decision, and then, on the following turn, the consequences, explained by an "Understand" sheet. A virtual adviser, a character in the game, introduces everything new and comments on the results. Nothing in the game is left to chance: the world is the same for every student in a game, only their decisions differ, and that is what makes a rigorous debrief possible.

What level 4 makes students live through

These moments are guaranteed in every game, but this sheet says neither when they come nor how they turn out: the teacher can build the debrief on them, and a student who reads it gains nothing. The cause of the crisis (a tech bubble, the failure of a giant, debt, fraud, world trade, insurance...) depends on the game; its mechanism does not.

- Arrival in Tokyo. A bonus is paid. The virtual advisor introduces two new investments: the real estate fund (rent every turn, each payment locked for twelve turns) and private equity (subscription open for a few turns only, capital returned at the end of the game, increased).
- On the third turn of the level, the results season: the accounts of the previous level, and everything listed reacts.
- Long stories, revelations and reversals, including a story where the market is afraid before it knows: the price falls on a doubt, then the facts decide.
- A crisis: three signals in a row (an expert's view, an official announcement, a rumour) while nothing moves yet, then panic news, then a fall of everything listed over three turns, close to a fifth, healthy companies included; the trough and its news item; then a full recovery over five turns, each turn with its news item, until prices are back where they were before the storm, before the review. No story lives during the fall.
- The level review: those who held got everything back; those who sold at the bottom lost for real; what was invested outside the listed market did not panic, coupons and rents kept being paid.

Minute-by-minute plan (computer room)

1. Picking up (5 min). Each student reopens their game. A one-sentence reminder of the level 3 review: where the result came from, coupons or prices.

2. Guided opening turn (5 min). On the projector: the bonus and the two new investments presented by the virtual advisor. A quick question before everyone confirms their decision: "locking money away for two levels, on what condition would you accept it?" Have students note who subscribes to private equity and who invests in real estate: we will come back to it in the debrief.

3. Independent play up to the review (25 min). Students move at their own pace. Two freeze-frames, in one sentence: when several news items follow one another on the same subject ("signal or noise?") and at the worst of the fall ("who sold? say nothing yet").

4. Class debrief (12 min). Working from the reviews on the students' screens, a discussion guided by the questions below. Show of hands: who sold during the fall, who held, who bought back at the trough, who had locked money away at the start of the level.

5. Summary (8 min). Four lines to write down: the longer money is locked away, the more it must be paid; a crisis hits everything listed, healthy companies too; as long as you do not sell, it is a value that moves, not a loss; whoever holds gets everything back, whoever sells at the bottom loses for real.

Flipped classroom

What to set at the end of the previous session: "play level 4 for next time, about 30 minutes; write down what you did with the bonus, and what you did during the fall". In the next session, 20 minutes of debrief with the same questions, then the summary.

Questions for the class

- Signals came before the fall. Who read them as signals? Who acted? At the time, could you tell a signal from an ordinary news item?
- During the fall, who sold, and when? What happened to those who held? What was the hardest thing not to do, and why?
- What did your investments outside the listed market do during the fall? Is that because they are "better"? What did they cost in exchange?
- At the start of the level, a bonus and two new investments. Who locked money away for two levels? What held you back? After the crisis, do you regret it?
- After the trough, the market rose five turns in a row, back to where it was before. What did the recovery news say? Who bought back at the trough, and why so few? What does that say about the price during the panic?

Ways to take it further

- Next session: level 5, inflation, the central bank and interest rates. Previous session: level 3.
- Research activity: pick a real financial crisis and find, in the press of the time, three signals that came before it; then say whether they could be read as signals at the time.
- Taking part in Global Money Week (March) with a tournament between classes.

Practical information

- Access: https://capitalvalley.app/education
- The student version needs no account, no email address and no personal data. Suitable for use in school, in the computer room or on a smartphone.
- Teacher contact: education@capitalvalley.app