Who receives currency first?

Understanding the Cantillon Effect | Parent and teacher guide | Ages 13-18

Central question: How can the point where new currency enters an economy affect who can spend earlier, which prices change, and whose income catches up later? Choose the simulator OR the paper activity for the short session.

Prepare in 5-10 minutes

Use this pack for homeschooling, summer learning, classroom enrichment, or a library group. Learners need basic reading and division. Percentage work is optional. One adult and one learner can complete either route; larger groups can share the four paper roles.

Background: MLMF Monetary Policy, Lesson 5. Pack 01 explains loan-created deposits; Pack 02 explains the deposit as a bank obligation. Pack 03 introduces definitions and purchasing power.

Choose your route	Student pages and materials
Online core	Pages 1 and 4; internet-connected device; pencil. Open the simulator before the lesson.
Paper core	Pages 2-4; pencil and scrap paper. Page 3 can be read without cutting. Print it single-sided if cutting.
Extensions	Page 4 assessment: add 5-10 minutes. Paper Round 3 and percentages: add 5-10 minutes. Page 5: viewing/reading time plus 15-20 minutes.

The 15-minute core

0-2 minutes: Ask the central question and record a prediction.
2-4 minutes: Read the explanation on teacher page 2; introduce the chosen activity.
4-9 minutes: Run the two simulator pathways OR the two paper rounds.
9-13 minutes: Discuss the three questions on student page 4.
13-15 minutes: Complete the exit sentence and revisit the prediction.

What learners should be able to do

Trace a receipt-and-spending sequence; compare outcomes while keeping the new amount constant; explain why prices and incomes may adjust at different times; distinguish a model rule from evidence about the world.

Keep the guides separate: Student pages contain activities and writing space. This teacher guide contains the answers. The short session does not include all optional work.

Run the simulator comparison

Online route | Student pages 1 and 4

A short explanation to read aloud

> New currency reaches particular people or institutions before it reaches others. If early recipients spend before some prices adjust, they may buy on different terms from people whose income arrives later. The entry point and spending path can affect relative prices and purchasing power. This is the central idea we are exploring as the Cantillon Effect. Timing can matter; the result depends on what happens to spending, production, prices, and incomes.

Definitions: This pack uses "new currency" broadly for newly created purchasing power, including bank deposits. Central-bank sources usually call those balances deposit money; currency often means notes and coins.

Use the same settings for both pathways

Open monetarymastery.net/pages/cantillon and choose **Open Laboratory**. Keep **New Money Created: $100 Billion** and **Money Circulation Speed: Medium**. In **Compare Two Monetary Pathways**, choose **A: Financial Markets** and **B: Direct Payments**. Predict, then select **Run Side-by-Side Comparison**.

Observed comparison	A: Financial Markets	B: Direct Payments
First receiver	Financial Markets & Asset Buyers	Households Receiving Payments
Displayed path	Fed > Markets > Businesses > Households	Fed > Households

The comparison places more early simulated pressure in financial and asset channels in A. Ask learners to describe the relative asset/consumer bars, not turn their widths into inflation percentages. The model is illustrative; it supplies neither measured historical effects nor a forecast. If labels change, record the current display.

Keep the monetary mechanics clear

A commercial bank loan creates a deposit rather than simply transferring a prior customer deposit to the borrower. It also creates a debt owed by the borrower. Capital, settlement funding, risk, demand, and policy constrain lending; this is not a debt-free gift or unlimited wealth. See the Bank of England explanation.

The simulator's "Fed" arrows are schematic. They do not mean every commercial bank loan begins with newly supplied central-bank money, or that every government payment creates new money. An asset seller also gives up an asset for payment: receipt alone does not establish a net-wealth gain. "Closer" refers to access and timing, not physical distance.

Run the paper market

Paper route | Student pages 2-4 | All amounts and price rules are fictional

Purpose: Hold the allocation at $20 per buyer while changing receipt order. The scripted price increase illustrates a possible timing effect; the exercise does not derive or forecast inflation.

Set up and read the rules

Assign A, B, shopkeeper, and observer. With one learner, the adult runs the shop and calls the turns; the learner records both buyers. Begin each round with 20 identical notebooks, zero buyer balances, and zero shop receipts. Write allocations and purchases on paper; real cash and physical notebooks are unnecessary.

Round 1: Allocate $20 to A. A spends it at $4 per notebook. Change the posted price to $5. Allocate $20 to B; B spends it at $5.
Round 2: Reset everything. Allocate $20 to B first at $4, then $20 to A at $5.
Optional Round 3: Reset again. A acts before B, but both pay $4. Allocate $20 to each.

Answer table

Round	A: price / bought	B: price / bought	Shop receipts / left
1: A first	$4 / 5 notebooks	$5 / 4 notebooks	$40 / 11 notebooks
2: B first	$5 / 4 notebooks	$4 / 5 notebooks	$40 / 11 notebooks
3: no price rise	$4 / 5 notebooks	$4 / 5 notebooks	$40 / 10 notebooks

Both buyers finish with $0 each round. The shop receives the same $40 that the buyers spend; spending does not create another $40. Unused stock remains available in every round, so the difference is not caused by the first buyer taking the last notebooks.

What changed, and what did not?

Rounds 1 and 2 reverse who gets the lower price. The allocations, prices, stock, and total sales stay the same. Round 3 removes the purchasing advantage because the price stays constant. These outcomes follow from the rules, not from the labels "asset-owning" and "wage-earning." People can belong to both groups.

Optional percentages: The price rises (5 - 4) / 4 = **25%**. The same $20 buys (5 - 4) / 5 = **20% fewer notebooks**. The starting quantities differ: dollars per notebook versus notebooks per $20.

Boundary of the model: Funding for the allocations is not modeled. They are not a complete bank loan, wage payment, or asset purchase. Use Pack 01 for a balance-sheet account of money creation.

Discussion and answer guide

Use reasoning and the stated conditions when assessing answers

Three core questions

1. Who received new purchasing power first?
Online: A begins with financial markets and asset buyers; B begins with households receiving payments. On paper: A receives first in Round 1, B in Round 2. Early receipt permits earlier spending; an advantage depends on the prices and terms available then.

2. What if living costs rise before income?
An unchanged income buys less at higher prices. A later pay rise may catch up fully, partly, or more than fully. The result depends on its size, timing, and the household's purchases. A rise in the dollar wage alone does not show a rise in purchasing power.

3. What if output expands or wages adjust sooner?
More goods available can reduce price pressure relative to a case with unchanged supply. Faster income adjustment may narrow the timing disadvantage. Saving and spending choices also matter. These changes need not remove every distributional effect.

Optional assessment | 8 points

A. Changed variable and constant amount (2): Online: the entry pathway changes (1); the new amount stays $100 billion (1). Speed also stays Medium. Paper Rounds 1 and 2: receipt order changes (1); each buyer still gets $20, or $40 total per round (1).

B. Constant-price counterexample (2): Each buyer gets 5 notebooks: $20 / $4 (1). There is no notebook-buying advantage from timing under these rules, since both face the same price and enough stock (1).

C. Bank loan versus gift (2): It is not a debt-free gift (1). The borrower receives a deposit balance and owes the bank repayment, with interest if the loan contract requires it (1).

D. Evidence for a historical claim (2): Name a relevant observation, such as dated payment records, asset prices, consumer prices, wages, or output (1), and explain how it could test the proposed receipt or adjustment sequence (1). A simulator result alone is not historical evidence.

Sample exit sentence

> Receiving new currency earlier can matter because it may allow spending before some prices rise. If production expands or the later recipient's income adjusts sooner, the purchasing-power difference could be smaller. In our constant-price round, both buyers could buy the same amount.

Listen for: an identified pathway, a price/income timing mechanism, and at least one condition that could change the result. Accept different conclusions supported by the activity and clear reasoning.

Extend the learning

Documentary, curriculum reading, and source comparison | Student page 5

Prepare the viewing

Preview Hidden Secrets of Money, Episode 4. Assign the full film or an excerpt you have checked. Allow its viewing time separately, then 15-20 minutes for the worksheet. Learners record actual start/end timestamps for their chosen claim; this pack does not prescribe an unverified clip.

Guide the five responses

1. Paraphrase a film claim. Check that the learner identifies an actual statement about creation or distribution and records its location. Treat the documentary as an argument to examine; a confident presentation is not supporting evidence by itself.

2. Compare the lending explanation. Read the opening of Money Creation in the Modern Economy alongside Pack 01. The key point is that lending creates a matching deposit. If a deposit-multiplier sequence is discussed, explain that it is not a literal description of banks waiting for prior deposits and mechanically multiplying reserves. Record a specific agreement or difference.

3. Propose evidence. Good answers identify records that could reveal who received funds, what they spent on, and when prices or incomes changed. A selected example may illustrate a claim without establishing that it holds in every setting. Ask what other causes would need consideration.

4. Apply the reading. In the second post of Nominal Confusion, read "What Is Nominal Confusion?" and "Wages". A later pay rise can leave buying power lower if living costs rose by more. Optional calculation: a 4% wage rise with a 5% basket-price rise gives 1.04 / 1.05 - 1, about **-0.95%** in real purchasing power.

5. Form a careful conclusion. Look for a revised explanation plus an unresolved question. An example: "Entry points can affect the order of spending, but I would need dated price, wage, and payment evidence to explain a particular episode."

A historical extension

Read Cantillon, Part II, Chapter VI. In the mining example, mine owners, workers, and suppliers receive additional income early; some people with unchanged wages or other fixed incomes face higher costs later. Ask which steps are argued and which would require historical evidence.

Adapt the challenge

Younger or less confident learners: Read aloud, use oral answers, and count notebooks without percentages.
Older learners: Choose a documented episode, define an outcome and period, then consider supply changes and other explanations before attributing results to the entry pathway.

Sources and next steps

Checked 21 September 2026 | Click the titles or use the printed addresses

1. MLMF Lesson 5: The Nature of Money Creation - Cantillon Effect

Curriculum connection: the entry point and distribution of new currency.

https://www.monetarymastery.net/forums/topics/70750-the-nature-of-money-creation-cantillon-effect

2. MLMF Cantillon Effect Simulator

Interactive model used in the core comparison; illustrative outputs, not empirical estimates.

https://www.monetarymastery.net/pages/cantillon

3. Hidden Secrets of Money, Episode 4: The IOU Machine - How Currency Is Created

Documentary extension for identifying claims and comparing explanations.

https://www.monetarymastery.net/forums/topics/70734-episode-4-the-iou-machine-how-currency-is-created

4. Nominal Confusion: Why Rising Prices Do Not Always Mean Rising Value

Extended learning: the second post's definition and wage discussion.

https://www.monetarymastery.net/forums/topics/70864-nominal-confusion-why-rising-prices-dont-always-mean-rising-value

5. Bank of England: Money Creation in the Modern Economy (2014)

Primary institutional explanation of bank lending, deposit creation, and lending constraints.

https://www.bankofengland.co.uk/quarterly-bulletin/2014/q1/money-creation-in-the-modern-economy

6. Richard Cantillon: Essay on the Nature of Trade in General, Part II, Chapter VI

Primary historical argument: the mining example in Part II, Chapter VI.

https://www.econlib.org/library/NPDBooks/Cantillon/cntNT.html?chapter_num=25

Continue with purchasing power

Use the Inflation and Purchasing Power Simulator to explore what a changing price level means for wages and savings. It provides a natural bridge to the planned Pack 05: **When More Dollars Buy Less**.

Return to Teaching Resources for the current collection.