

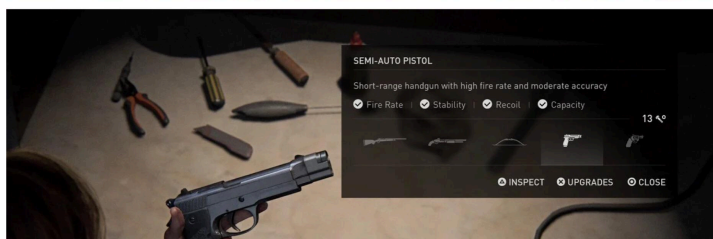
# Game Economies: Assignment 2

## Economy System in The Last Of Us: Part 1

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### Original Game

The original economy system in the game The Last of Us Part 1 is pretty simple, the player will collect resources throughout the map which they can use to craft items which they can use in combat and upgrade their weapon. The original system contains eight different kinds of resources that the player can collect



six of which can be used to craft Tactical items which they can use in Combat, There are four different kinds of items that they can craft using these six resources, each of them will take two resources to craft. Sometimes the resources they use will overlap each other. The other two resources can be used to upgrade the character's stats and weapons. These resources, which depend on the player's difficulty, will more or less change the gameplay experience and how a player will

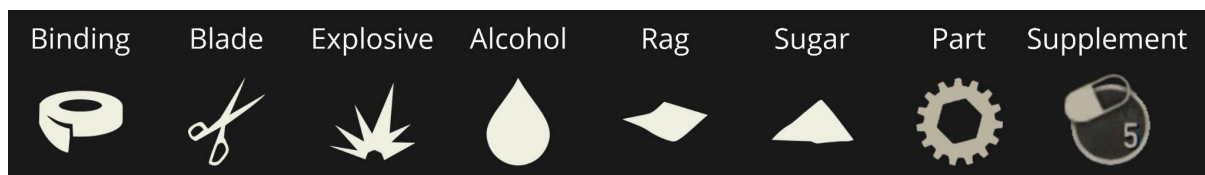
tackle their current situation. In lower difficulties, the amount of resources the player can collect is more than enough for them to play the game as a face-to-face combat game. If the player chooses to play the game with a harder difficulty, they are forced to manage the resources they get and choose what kind of items they need to craft. Because that one resource can be used in two different kinds of items.

## Design Goal

My plan for this system is to include a trading system around the map at various spots where the player may use the resources he or she has collected. To exchange for other resources such as ammo or vitamins to improve their stats. In this manner, in my opinion, the gameplay might still change significantly across players and difficulties. This contributes to the game's length and replayability. This economic system may also be utilized to enhance the plot; for example, I can change the prices of various things in the trading standard to reflect the current game circumstances and add side missions from the trader along the main story.









## How does it work

In my new approach, I will continue to use the game's original resources, but I will modify how frequently they appear on the map and restrict the quantity of all these objects the player may locate based on the difficulty. The six materials that may be utilized for crafting are acquired in pieces in the original method, and the player can carry three entire pieces of each resource. That amount will still be used in my system. In addition, I will include a trading mechanism in the game that will allow the



player to utilize these six distinct types of resources to trade ammo, while the other two resources may be used to improve.

The first six materials in this image are utilized for crafting, while the latter two are used to upgrade player weapons and stats. In the original system, they may all be gathered in the same way.

Ammo									
			9MM	Revolver	Shotgun	Rifle	Arrow	Part 	Supplement 
Binding 	X 1 =		X 4	X 2	X 1	X 0	X 1	X 10	X 5
Blade 	X 1 =		X 6	X 3	X 2	X 1	X 1	X 15	X 7
Explosive 	X 1 =		X 8	X 2	X 2	X 2	X 2	X 20	X 10
Alcohol 	X 1 =	or	X 6	X 1	X 3	X 1	X 1	X 15	X 12
Rag 	X 1 =		X 5	X 2	X 2	X 1	X 1	X 10	X 10
Sugar 	X 1 =		X 3	X 1	X 1	X 1	X 0	X 10	X 5

In this table, I explain how trading will function. On the left, I list the items that the player may acquire throughout the area and use to trade ammunition, parts, and supplements. The quantity of resources available to players is governed by the utility of each resource and the value of the goods they may produce. And it is also affected by the ammunition they are dealing with. For example, 9 mm ammo deals less damage than revolver ammo, so they may obtain less of it; shotgun, rifle, and arrow ammo is uncommon in the game and deals a lot of damage, thus the player may only trade for one or

Craft	
Molotov cocktail	Alcohol + Rag
Shiv	Binding + Blade
Health kit	Alcohol + Rag
Nail bomb	Blade + Explosive
Smoke bomb	Sugar + Explosive

two rounds at a time. This mechanism can be a dynamic chest dependent on the intricacy of the player's choosing, the player's location, and the player's inventory. For example, if the player has a lot of sugar but no shotgun ammo, depending on the complexity, I may give them more ammo per resource or less.

<div><div>Bolt-action rifle</div><div><div>Statistics</div><div><div>Fire rate</div><div>Reload speed</div><div>Damage</div><div>Accuracy</div></div></div></div>	<div><div>Pump shotgun</div><div><div>Statistics</div><div><div>Rate of fire</div><div>Reload speed</div><div>Damage</div><div>Accuracy</div></div></div></div>
<div><div>Bow</div><div><div>Statistics</div><div><div>Fire rate</div><div>Reload speed</div><div>Damage</div><div>Accuracy</div></div></div></div>	<div><div>Revolver</div><div><div>Statistics</div><div><div>Fire rate</div><div>Reload speed</div><div>Damage</div><div>Accuracy</div></div></div></div>
<div><div>Semi-auto pistol</div><div><div>Statistics</div><div><div>Fire rate</div><div>Reload speed</div><div>Damage</div><div>Accuracy</div></div></div></div>	

## Inspiration and method of evaluation

My inspiration for this system came from the bullet trading system in the game Metro. Bullets are very valuable in the game scenario for all living human beings who reside beneath the ground in the subway tube because they need bullets to defend the mutated creatures. The world setting of The Last of Us is largely the same; they both live in an Apocalyptic world full of monsters and humanity fighting to survive.

To evaluate my system, I believe I will need to collect data from various telemetries, such as gameplay times during combat, gameplay times outside of combat, how many resources they collected between combats, how many resources the player used during combat, what the player traded at the trading point, and how many times the player died.

**Gameplay Time During Combat vs. Outside of Combat:** This assists in determining the player's primary interests in the game. Spending more time in fighting may suggest a predisposition for action or strategic components, whilst spending more time outside of combat may show a desire for exploration, puzzle-solving, or narrative themes.

**Resources Collected Between Combats:** This information illustrates how players approach resource management and planning. Efficient resource gathering could imply good game planning and anticipation.

**Resource Usage During Combat:** This can shed light on the player's battle style and resource use efficiency. For example, a high resource utilization may indicate a more active or risky combat strategy.

**Number of Times the Player Died:** This information reveals the player's skill level and learning curve. Frequent deaths could indicate a challenging game or issues in certain elements of the game.

**Trading Activities at Trading Points:** This displays the player's economic strategy and knowledge of item values in-game. Players may exchange various goods based on their game progress or personal strategies.