Automatism

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Economics

Economics is an abstract environment of aggregate results based on the monetary exchange of participating agents. The studied rules are not causes, but effects of the psychology of the participating agents. It is a chaotic system, and therefore unpredictable, however if we observe the behavior of goods trading we will find a small pattern.

Trading agents within the economy interact with others, under the proposal that everything except breathing has an associated cost. For the realization of commercial activities that allow them to have a monetary income, there is always an associated cost. The famous characterization of liabilities and assets represents exactly this: liabilities or costs are those activities performed by the trader that subtract capital, assets or income are those activities that add capital. When we calculate the balance between these two metrics we find the profitability of a process. If income is greater than expenses, the perceived difference is called profit; if expenses are greater than income, the difference is called loss.

Trading participants in the system aim to accumulate as much income as they can and greatly reduce their expenses. When they have a sufficiently high amount of liquidity (savings from past profits), they can assume the risk of speculation (assume loss-making activities with the speculation that the economic balance will turn positive in the future).

Income can be perceived from 2 origins: from a service (when one agent pays another to do something) or from a good (when one agent pays another to deliver a material object). To produce, design, think, create goods, labor is needed, and this labor is what we call services.

Agent1 wants to buy a Good from Agent2 who is selling it. For Agent2 to obtain the Good, they had to obtain it in one of two ways: either they bought it or they produced it. If they bought it, someone else had to produce it. We will delve into the second case, where they produced it themselves.

Agent2 doesn't know how to make the Good, Agent3 does. Agent3 doesn't have materials, Agent2 has the money to buy the materials, so they reach the following process:

Agent2 pays Agent3 for the service of making the Good and buys the materials so Agent3 can produce them. These materials were sold by Agent4. Once the Good is made, Agent2 sells the Good to Agent1. How does Agent2 calculate the price of the Good?

Agent2, to have the Good, assumes Expense1 (paying Agent3) and Expense2 (buying materials from Agent4), so the desirable price of the Good would have to be x where x > Expense1 + Expense2. Any price above the sum of expenses will produce a profit. Agent2 can set any price they want but must consider:

- Whether Agent1 is willing to pay the price they set
- That competition exists, where Agent5 sells the same Good at a specific price
- Receiving sufficient compensation

Agent2 will balance these prices until achieving the appropriate price.

Agent1 is a customer. Agent2 is what they call a bourgeois. Agent3 is a worker. Agent4 is a supplier.

These roles, although they may seem like immutable characteristics of being, are the characters that economy agents take when interacting with each other. They are not specific to the person. In the previous case, for example, seen from Agent3's perspective, Agent2 is their customer who is paying for their services, their living costs are their Expenses, and they set (in this ideal scenario) the price of their services in relation to how much it costs them to live. We observe the same but from the point of view of another bourgeois: Agent4 sees Agent2 as their customer and will have their internal processes for producing the Good they sell. This creates a dependency tree for each of the Goods that surround us where part of the price goes to each of the participants.

Economic Use Systems

At an economic level at least, known political ideologies can be posed under this economic model.

Communism removes the bourgeois from the equation. Under communism, all system agents are customers and workers of the state (the only bourgeois). The state is the supplier of the state itself. This same entity is an enormous decision-making machine that determines what needs to be produced and how much, using the economic model but assuming the role of all bourgeois in the production chain. The idea is to minimize the profit produced to benefit workers. The problem is that at large scale, due to organizational necessity (done by people), the benefits generated by state operations don't reach coverage. In theory, a perfectly optimized state with correct food prices, correct salaries for the right people with the right processes could work, but the price of this ultra-optimization is so high that in practice the state collapses under its own weight.

Capitalism, currently, the economy works as is. Everything enters the market, everything around you has a price, living has a price. All agents have to pay for a roof, pay for food, pay to move, etc. This brings its own problems, which are more of an implementation problem.

Agents don't start with the same capital. The birth context of the agent strongly conditions their abilities to act in the economy. As we saw before, to create a process where our role is bourgeois, we need sufficient liquidity to begin. Liquidity obtained through family context is the common factor observed among the largest producers currently, forcing most agents to participate in the economy by providing services or participating as bourgeois in low-profitability processes, keeping high-profitability ones for those who already have accumulated family capital, further increasing the gap between both.

The cost of living in relation to the services market (what price you can offer for a service) is extremely high, reducing individual saving capacity extremely. The phenomenon where service prices equal living expenses is commonly observed, converting agents into wage slaves.

Due to the above, the professional supply of the market is increasingly smaller. The time required for professional training has become a privilege of those families that have the ability to save enough to cover the expenses of the non-productive agent.

Others: Using this we can also pose other practical systems, which may be known by different nomenclatures.

Free Market: The capitalism mentioned above with theory based on a meritocratic framework where all agents are equal and start at the same point, mentions that the chaotic rules of the market point to a communal good, never put into practice (current generational wealth never ceased to exist).

Feudalism: The only goods are basic ones and land. Production chains instead of being decentralized end up joining in the same agent (a king) where the Good is their land and protection.

Decentralized Low-Productivity Communism: Small communities where the productive focus of their economy is the sustenance of its members, functional on a small scale due to low organizational cost, but unless there is a source of external matter to the model, it doesn't work. Isolated models have not been observed, not practical for maintaining current living standards.

Cost of a Good

Let's observe a Good. Having this, to experiment, let's try to make this good as cheap as possible. Let's study its cost. According to what we posed earlier, this would be the following:

Cost Good A = Expected Profit A + Production Cost A

where Production Cost A = sum of necessary Goods + Productive Service Cost A (the worker who produces)

To shorten, let's abbreviate and identify: CG_A = EP_A + PC_A

Well, we know that the production chain of this good is the following:

- Good A needs Good B and Good C
- Good B doesn't require a good to be produced (these are raw materials that require extraction, like plantations, minerals, etc.)
- Good C requires Good D
- Good D doesn't require a good to be produced

From this we can pose:

CG_A = EP_A + PC_A PC_A = CG_B + CG_C + PSC_A (Productive Service Cost A)

CG_B = EP_B + PC_B PC_B = PSC_B (Cost of paying someone to extract this raw material)

CG_C = EP_C + PC_C PC_C = CG_D + PSC_C

CG_D = EP_D + PC_D PC_D = PSC_D

Using equity, we're going to pose the cost of Good A by replacing arguments:

CG_A = EP_A + PC_A CG_A = EP_A + (CG_B + CG_C + PSC_A) CG_A = EP_A + ((EP_B + PC_B) + (EP_C + PC_C) + PSC_A) CG_A = EP_A + ((EP_B + PSC_B) + (EP_C + CG_D + PSC_C) + PSC_A) CG_A = EP_A + ((EP_B + PSC_B) + (EP_C + (EP_D + PC_D) + PSC_C) + PSC_A)

Being the final equation:

CG_A = EP_A + ((EP_B + PSC_B) + (EP_C + (EP_D + PSC_D) + PSC_C) + PSC_A)

or also:

CG_A = EP_A + EP_B + EP_C + EP_D + PSC_A + PSC_B + PSC_C + PSC_D

What does this equation tell us: The cost of a good is then the sum of the expected profit and the cost of workers involved for each of the steps in the production chain.

With this, we can pose the ideal "communist" case, where expected profit is minimal and the objective is production, in that case: EP_A = 0 EP_B = 0 EP_C = 0 EP_D = 0

and the equation remains:

CG_A = PSC_A + PSC_B + PSC_C + PSC_D

Automation

Let's modify the model, add a new agent, the automatic agent (AA). This automatic agent serves as a replacement for the productive service that an agent would provide. Unlike the human agent that participates in the economy, this agent doesn't require food, only the energy that feeds it. The cost equation of the automatic agent is:

Automatic Agent Cost A = Agent Energy Cost (It's the same cost per agent)

or

AAC_A = AEC

Now, with the introduction of this automatic agent, we can replace parts of the production chain. Since energy is cheaper than the cost of living of a worker, then returning to the

previous case of reducing costs, the cheapest thing for us will be to automate the entire production process, going from:

CG_A = PSC_A + PSC_B + PSC_C + PSC_D

to:

CG_A = AAC_A + AAC_B + AAC_C + AAC_D

and as we said AAC_x = AEC, then:

CG_A = AEC + AEC + AEC + AEC

or reduced:

CG_A = AEC * 4

So observing this we see the following: as we automate the services of a production chain, the cost tends more toward the cost of energy.

Energy is a production process too, which implies we can automate its generation. Since energy is quantifiable, for there to be positive feedback, automatic energy production has to follow the following rule:

Energy Produced > Energy required to produce

If and only if this rule is met, we will have a feedback loop in energy production, which being automatic and without humans involved inflating the price, would make energy free.

Since energy is then free and using what was said earlier, we can say:

If energy production is 100% automated and the energy produced is greater than the energy required to produce energy, then as we automate the services of a production chain for a good, the cost of the good will tend to zero.

Automatism

Automatism is the system that proposes a single economic investment for the creation of an exo-economic system with cost 0 for limited production of basic survival goods with unlimited and free access.

The basic goods proposed to be produced would have to serve the function of:

- Being able to be mass-produced without any human intervention
- If desired by the consumer, serve as sole sustenance
- Allow the consumer to live a healthy and complete life with this sustenance

The goods to be developed would be the following:

- Basic nutritional sustenance

- Shelter
- Clothing
- Access to water
- Access to electricity
- Access to information, communication and education
- Access to computing
- Basic transport
- Basic health service
- Governance services

These goods are developed in self-sustaining modules with autonomy. These modules, which would be goods factories, would also be developed 100% autonomously. The investment will cover the complete production of these module factories until reaching self-replication without external resources.

As I posed throughout the writing, economics is a fundamental tool for human beings, however the problems reflected in our current way of organizing ourselves are due to our dependence on it. In the ideal implementation of this idea, automatism functions as an existential safety net for people and economics functions above this net.

Implementation Note

Violence is a viral idea that self-replicates with participation in it. Exercising violence of any kind will only bring about equal or worse violence being exercised upon you.

The real implementation of this project is only achievable in a civilization which has sufficiently developed international logistics channels, highly sophisticated communication channels and artificial intelligence systems (non-conscious) good enough to automate as much as possible of the production chain. All these conditions are met under an environment of very high international tension. We hang by a very fine thread and have an extremely small time frame for successful implementation of this project.

This would be the first great human community project to be achieved, requiring immense global cooperation, but upon fulfillment, a new era would begin.