Why Markets Fail? The Economics of Covid-19

Part 1: Markets and Market Failures

Jim Dana

Northeastern University
Markets are Efficient

Markets work well in many settings.

1. Costs are minimized
2. Consumers pay only the economic costs of the goods they buy
3. Producers or firms are adequately compensated for capital investments and risks
4. The allocation of goods is efficient, or Pareto optimal

When economists say that a market works well, or is efficient, they mean that it results in a Pareto optimal allocation: there is no way to make everyone better off by altering the decisions that markets make.

But clearly markets do not always work well. For example, many workers are unemployed in a recession.
Another way to describe economic efficiency is maximizing the gains from trade. The consumers’ gains, or *Consumer Surplus*, is the difference in the value or willingness to pay and the price paid. The sellers’ gains, or *Producer Surplus*, is the difference between the price and their economic costs.
Market Failures

When don’t markets work? A market failure is a reason that markets may not be efficient.

1. Market Power - industries aren’t competitive
2. Asymmetric Information - quality or effort may be hard to observe
3. Externalities - bystanders can be affected by decisions
4. Public Goods - even those who don’t pay can consume
5. Market Frictions - markets aren’t free
6. Uncertainty - uncertainty is costly; asymmetric information and market frictions interfere with private insurance.
What about Inequality?

In addition to market failures, maximizing surplus may not be the only objective.

Inequality is not a market failure as we define it.

But inequality can lead to political unrest and uncertainty, which are inefficient.

And if equality is something we all value (are willing to pay for), then increasing equality can be efficient.
1. Market Power

- Firm’s with market power (monopoly) set inefficiently high prices
  - Output is inefficiently low
  - Some consumers don’t buy even though they value the good more than its cost
- Firm’s with market power may also make other inefficient decisions
  - Product quality
  - Privacy
  - Innovation
- Government antitrust policy and consumer protection policy limits market power.
2. Asymmetric Information

- Incomplete information, also called hidden information or adverse selection.
  - Ability
  - Health Status
  - Quality (durability)
- Imperfect information, also called hidden action or moral hazard.
  - Effort
  - Risk taking and precaution taking
  - Quality (safety)
Private Mechanisms that Mitigate Asymmetric Information Inefficiencies

- Warranties
- Reputations
- Signaling
- Repeat purchase
- Financial incentives in contracts
Government Mechanisms that Mitigate Asymmetric Information Inefficiencies

- Product and safety regulation
- Licensing
- Disclosure requirements
- Public provision
- Mandates
3. Externalities

• Consumption sometimes benefits individuals besides the purchaser, and sometimes harms individuals besides the purchaser.
• Positive externalities:
  • Fire sprinklers, vaccinations, and other precautions
  • Phones and other network products
  • Beautification
• Negative externalities:
  • Pollution
  • Noise
  • Risky behavior
4. Public Goods

- Some goods are freely available to everyone (or cheaply available) such as information, air, national defense, street lights and lighthouses, roads, and many safety investments.
- These goods are non-excludable and nonrivalrous goods.
- Public goods are not supplied efficiently by markets.
- Examples
  - Lighthouses, street lights, national defense
  - Information
Mechanisms that Mitigate Externalities and Public Good Inefficiencies

- Property rights, such as copyrights and patents. Including public and private enforcement systems.
- Fees/Tolls/Taxes or Subsidies/Rebates
- Regulation: Process/Behavior Standards (and fines)
- Regulation: Performance Standards (and fines)
- Government Provision
5. Market Frictions and Uncertainty

Governments intervene to stabilize economies in times of crisis. Why? What can governments do that markets can’t do?

- Markets are not free. Many financial markets can’t survive.
- Allocating resources efficiently is challenging following large shocks
  - Infrastructure (markets and firm relationships) needs to be in place
  - Shocks cause financial and real disruption to existing infrastructure
- Shocks lead to financial distress which can have large negative externalities.
- Asymmetric information problems become much worse during shocks. We may assume the worst about others.
Mitigating Inefficiencies from Uncertainty
Fiscal and Real Shocks

Private mechanisms include insuring against risks and uncertainty, but these risks may not be diversifiable.

Governments can also help. For example, in a financial crisis

- Bailouts prevent financial distress and prevent financial ripple effects, or externalities.
- Government guarantees can reduce information risks so markets can operate again.
- Governments are sometimes uniquely able to pool many risks because they can require participation
- Governments can pool risks over time more easily
Lessons

- Markets generally work and generally increase the total value or economic surplus. Governments typically do worse than markets, especially when there are no market failures.
- Market failures lead to inefficiencies. Governments can play a role in improving the efficiency of some markets.
- Governments can tax and subsidize market transactions, they can regulate, they can enforce contracts and transaction agreements, they can create property rights, and they can transfer income between individuals and across time. They can mandate participation. They can also replace markets (national defense, highway construction).