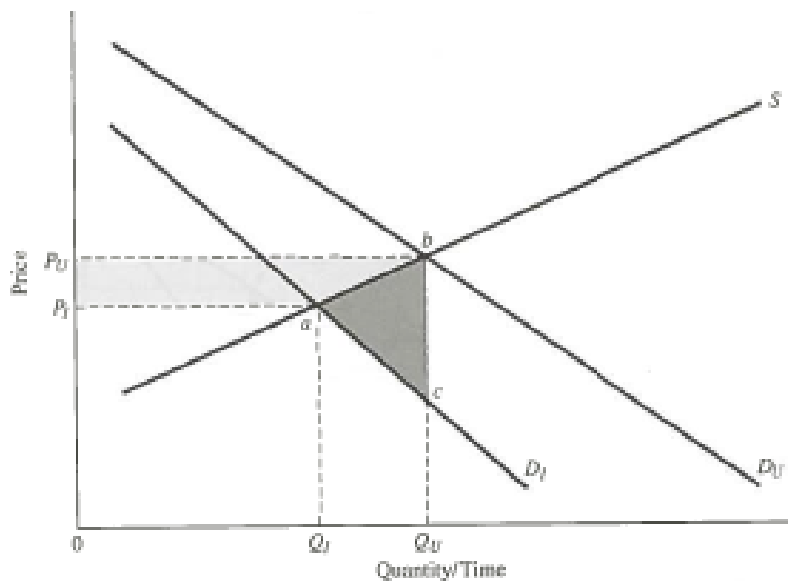PAI 897
Lecture 10
Information Asymmetries and coordination problems in markets

Quality uncertainty.

Figure 5.12 page 105. Informed demand versus uninformed demand.
The case for a consumer protection agency:

Uninformed consumption: Q_U
Informed consumption: Q_I
Deadweight loss if uninformed: abc
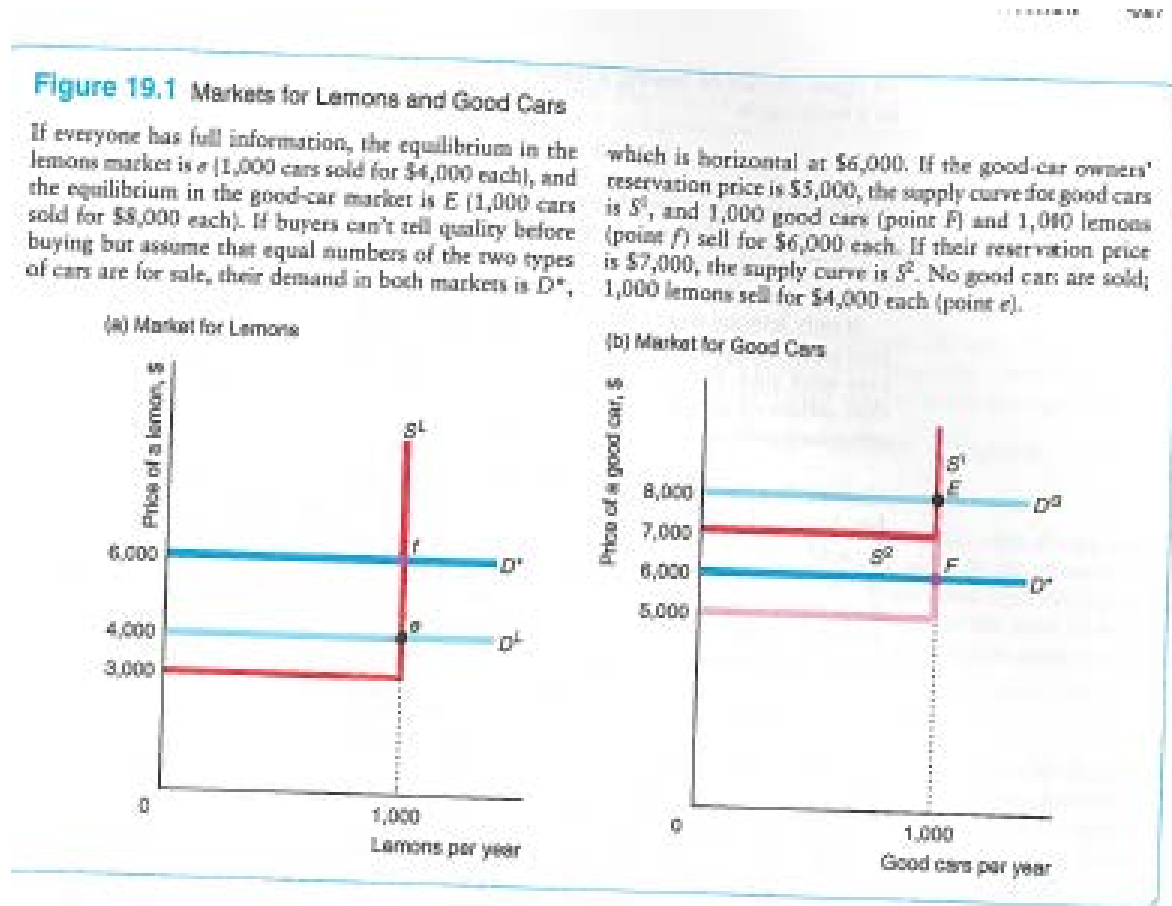Extra producer rent if uninformed: $P_U baP_I$

Figure 5.12   Consumer Surplus Loss from Uninformed Demand

Weimer and Vining.

http://foodfraud.msu.edu/wp-content/uploads/2014/08/flyer-FF-Reference-Sheet-Final.pdf

The 'lemons market' problem.

Perloff Chapter 17, page 619, figure 17.1

Figure 19.1 Markets for Lemons and Good Cars

If everyone has full information, the equilibrium in the lemons market is *e* (1,000 cars sold for $4,000 each), and the equilibrium in the good-car market is *E* (1,000 cars sold for $8,000 each). If buyers can't tell quality before buying but assume that equal numbers of the two types of cars are for sale, their demand in both markets is D^a, which is horizontal at $6,000. If the good-car owners' reservation price is $5,000, the supply curve for good cars is S^1, and 1,000 good cars (point *F*) and 1,000 lemons (point *f*) sell for $6,000 each. If their reservation price is $7,000, the supply curve is S^2. No good cars are sold; 1,000 lemons sell for $4,000 each (point *e*).

First, contrast full symmetric knowledge.

1,000 high quality cars sold at a price per car of $8,000,

1,000 low quality cars sold at a price of $4,000 per car.

But assume asymmetry, with sellers knowing more than buyers.

Buyers look at a car, say a 50% - 50% chance it is high/ low.

Take a price in between, demand curve is the average of the high and the low demand curve at $6,000.

Now no good cars are sold since the reservation price on the supply curve for good cars does not go below $7,000. Only bad used cars are available, and the bad has driven the good from the market.

Weimer and Vining note the concept of an experience good. We only know the true value after we have paid the price, so our willingness to pay may be higher or lower when we have actually discovered what this thing is really like.

TV adds – must act now. Snuggie on TV. Upside down tomato plants. Cat nail trimmer.

Another variant:

Adverse selection – hidden information by one side of the transaction influences their desire to enter into an economic agreement.

Insurance markets are one place to consider.

People most likely to benefit from insurance are more likely to purchase insurance, those less likely to buy are less likely to benefit.

Premiums will be incorrectly set if based on the likelihood in the overall population.

    Pre-existing conditions.

    Mandate all buy insurance.

Moral hazard – the provision of the product makes more likely the use of the product.

When one party is insured by another party, the presence of insurance and the difficulty of monitoring behavior may lead the insured party to undertake actions that increases the likelihood they will use insurance.

Moral hazard occurs when the party to be insured can affect the probability or magnitude of the event that triggers payment.

FDIC and the savings and loans crisis.

Bailout of banks. 'too big to fail'

Fried Green Tomatoes

[Evelyn is cut off in a parking lot]

Evelyn Couch: Hey! I was waiting for that spot!

Girl #1: Face it, lady, we're younger and faster!

[Evelyn rear-ends the other car six times]

Girl #1: What are you doing?

Girl #2: Are you crazy?

Evelyn Couch: Face it, girls, I'm older and I have more insurance.

Principal-agent problems. An agency relationship exists whenever there is an arrangement in which one party's welfare depends on what another person does.

The agent acts.

The principal is the party whom the action affects.

The problem is that the interests of the principal and those of the agent may not be the same.

The agent is the CEO, the principal is the stockholder.

The agent is the Senator, the principal is the citizen.

The agent is the person you paid to shovel, the principal is the homeowner.

The agent is the farmworker, the principal is the landowner.

The agent is the hired herder, the principal is the livestock owner.

	Good Test Day	Bad Test Day
High Study Effort	96%	82%
Low Study Effort	82%	68%

Can't tell the Good Luck-Low Effort from the Poor Luck-High effort outcome.

Can get into the details of how to solve this by contract design, but for the moment the nature of the problem is what we are after, and know that there are tools for designing contracts that deal with these problems.

Optimal Mechanism Design.

From Weimer and Vining, a few other topics are noted that we can consider.

Preferences change and can be manipulated. Our simple model took preferences as given. Preferences are possible to influence.

Public policy – education, rehabilitation, public service announcements, legislation…

Advertising – does it influence market shares of competing products, or demand for the class of the product?

Addictive goods as special case – consumption of product can lead to a preference shift.

Utility of an individual can be changed by the utility of other people, not just the person's consumption bundle.

Other regarding preferences rather than self regarding preferences.

Overlapping generations models, household models.

A household's utility leading way to intra-household analysis where decisions may be contested.

Preferences over the process, not just the outcome.

Legitimacy of preferences. Consumer is sovereign, but we at times decide the social harm outweighs the private increase in utility. Drug consumption, child pornography,…