Market Failures (Chapter 2)

Reasons for government intervention in the market:

1. Provide information and assure information flows.

2. Combat externalities.

3. Provide public goods.

4. Control noncompetitive behavior.

5. Change income distribution.

The first four reasons may be justified because they promote Pareto optimality (efficiency). The fifth reason may be justified also if society desires to guide the economy to a particular Pareto optimal resource allocation, for example, one that is more equitable.

1. Information

Some examples of government policies to promote the dissemination of information:

1. Education and extension.

2. Public supported media and information delivery (information highway).

3. Price assembly and distribution by government.

4. Labeling requirement. Truth-in-advertising policies.

2. Externalities

Externalities exist when the activities of one or more agents affect the preferences or technologies of other agents. There are negative and positive externalities, as well as production and consumption externalities.

> **Negative Externalities reduce utility or productivity. Example: pollution.**

> **Positive Externalities increase utility or productivity. Example: bees and pollinating apple trees.**

> **Production Externalities occur when productivity of an individual is affected by activities of others. Example: The smoke from a factory decreases the productivity of a nearby "air-dry" laundry.**

> **Consumption Externalities occur when the welfare of individuals is affected by consumption levels of other people. Examples:**

> > • **Noise pollution--people are affected negatively by blaring music at midnight.**

> > • **People may feel bad (suffer reduced utility) when other people starve.**

> > • **Envy—people's welfare may be reduced when viewing other people's success or high consumption levels.**

> > • **Consumption externalities lead to charity and raise issues of equity.**

3. Public Goods

Public goods can be consumed concurrently by more than one individual and are free to access. Examples include:

Knowledge from education and public research
National security
International trade agreements
Infrastructure, such as roads, bridges, etc.
Environmental amenities, such as clean air, nice
                                          scenery

4. Noncompetitive Behavior

There are many forms of noncompetitive behavior. Examples of the more extreme forms include:

Monopoly: One agent controls supply of a good.
Monopsony: One agent controls demand for a good (unions).
Middleman: One agent buys the product from suppliers to sell to demanders.

Other forms of noncompetitive behavior include cartels, oligopolies, and monopolistic competition. Policies used to control noncompetitive behavior include anti-trust legislation and regulation of natural monopolies (e.g., public utilities).
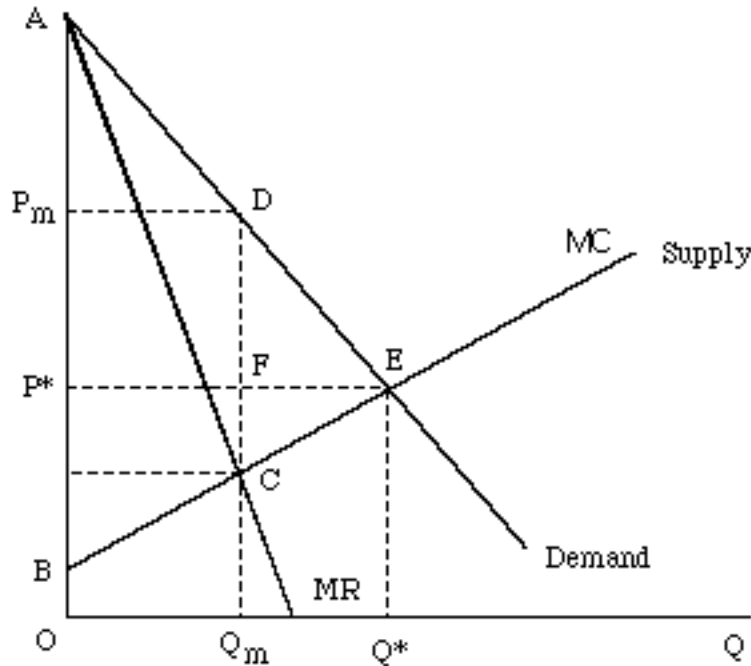
5. Distribution

Governments change the distribution of income and/or wealth through government transfer policies such as:

Income Taxes and Inheritance Taxes,
Social Security, Medicare, Medicaid, and AFDC.

Welfare Analysis:
The Inefficiency of Monopoly (One Seller)

Figure 0.2

MR= marginal revenue MC = marginal cost

Optimal outcome: MC = demand at point E.
Optimal Output = Q*. Consumer Price = P* same as MC.
Consumer Surplus = area AEP*. Producer Surplus = area P*EB.
Total Surplus for society under optimal outcome = AEB.

Monopoly outcome: MC = MR at point C.
Output Q_m < Q*. Consumer Price = P_m not same as MC (MC = P_{mc}).
Consumer Surplus = area AP_mD. Producer Surplus = area P_{mc}DCB.
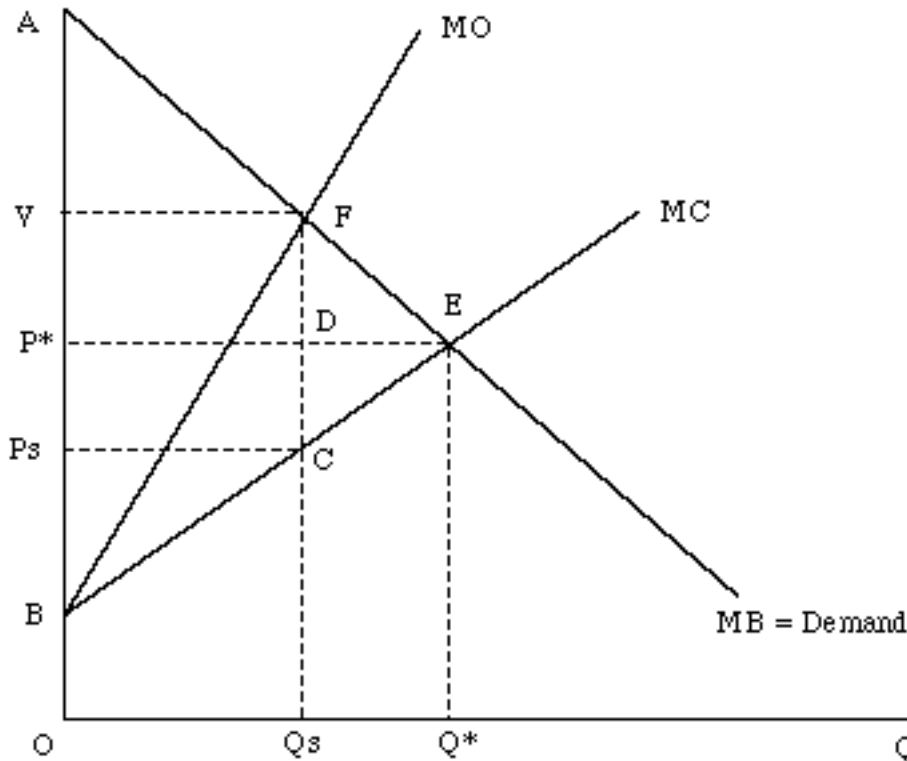Consumers lose area P_mDEP*, relative to optimal outcome.
Monopolist gains area (P_mDFP* - FEC), relative to opt. outcome.
Total Surplus for society under monopoly = area ADCB.

Total Surplus loss for society under monopoly = area DEC.

Welfare Analysis:
The Inefficiency of Monopsony (One Buyer)

Figure 0.3

MB = marginal benefit = demand
MC = marginal cost,   MO = marginal outlay

Optimal outcome still at E (where MB = MC)

A Monopsonist is a noncompetitive buyer. The Monopsonist reduces purchases to Q_s, where marginal outlay (MO) equals marginal benefit (MB).

At F, marginal benefit to monopsonist = V.
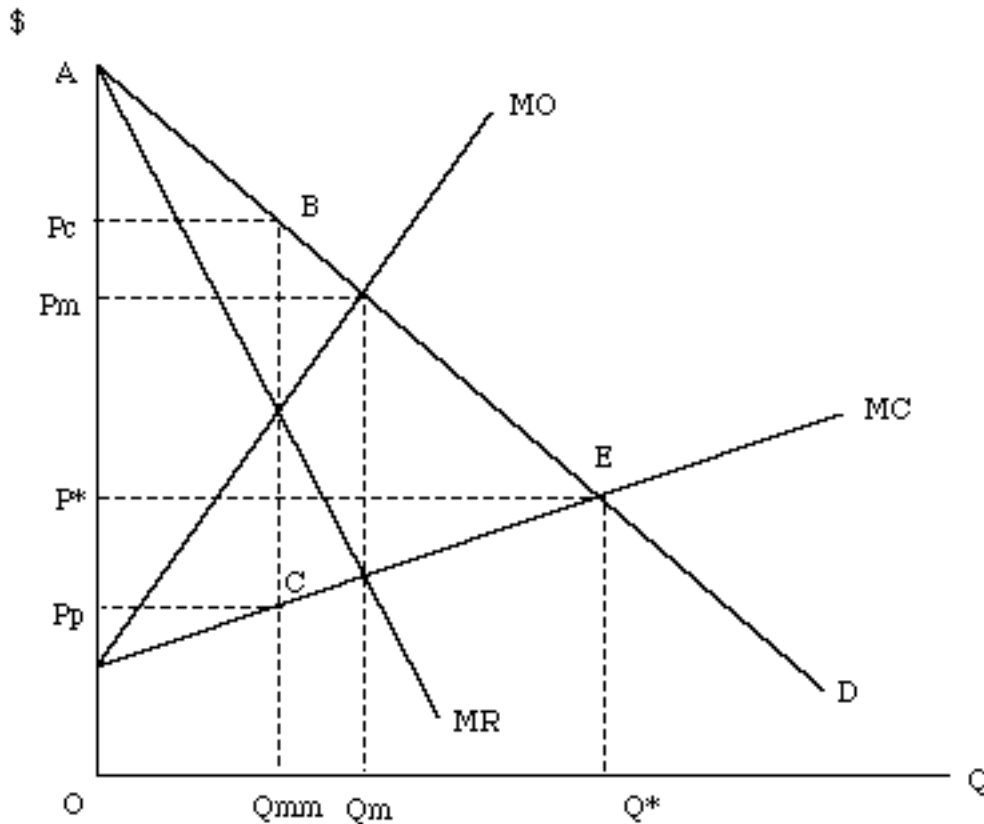Price paid by monopsonist to producers = P_s.
Monopsonist gains P^*P_sCE - FED.
Producers lose P^*P_sCE - DEC.
Social welfare loss because of monopsony = FEC.

Welfare Analysis:
The Inefficiency of "The Middleman"

Figure 0.4

D = demand   MC = marginal cost
MO = marginal outlay MR = marginal revenue

There are now three economic players: consumers, producers and the middleman. Middleman is monopoly to consumers; monopsony to producers. Middleman produces where MR = MO. Middleman Surplus = area P_cCBP_p. Less output is produced than under monopoly or monopsony. Welfare loss due to middleman = area BEC, relative to optimal outcome.