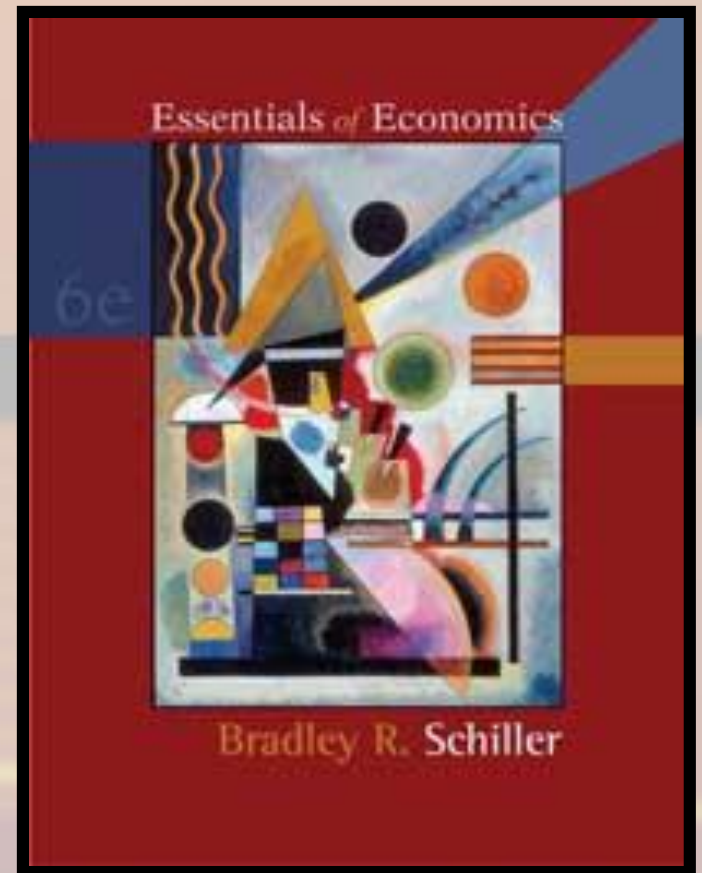


Chapter 1



The Challenge of Economics

The Central Problem of Scarcity

- Our materialistic wants and desires continue to grow:
 - Newest camera phone
 - Larger TV
 - Bigger home
 - More exotic vacation
- Why can't we have everything we want?
 - Our *wants* exceed our *resources*.

Economics and Opportunity Cost

- Economics:
 - The study of how best to allocate scarce resources among competing uses.
- Opportunity Cost:
 - The most desired goods and services that are foregone in order to obtain something else.
 - The next best alternative that you give up.

Factors of Production

- Resource inputs used to produce goods and services.
- Land, labor, capital, and entrepreneurship.

Scarcity

- Central problem of economics.
- Lack of available resources to satisfy all desired uses of those resources.

Three Basic Economic Questions

- WHAT to produce
- HOW to produce
- FOR WHOM to produce

WHAT to Produce

- Our wants exceed our resources.
- We have to decide what we want most.
- We have to sacrifice less desired activities and goods.

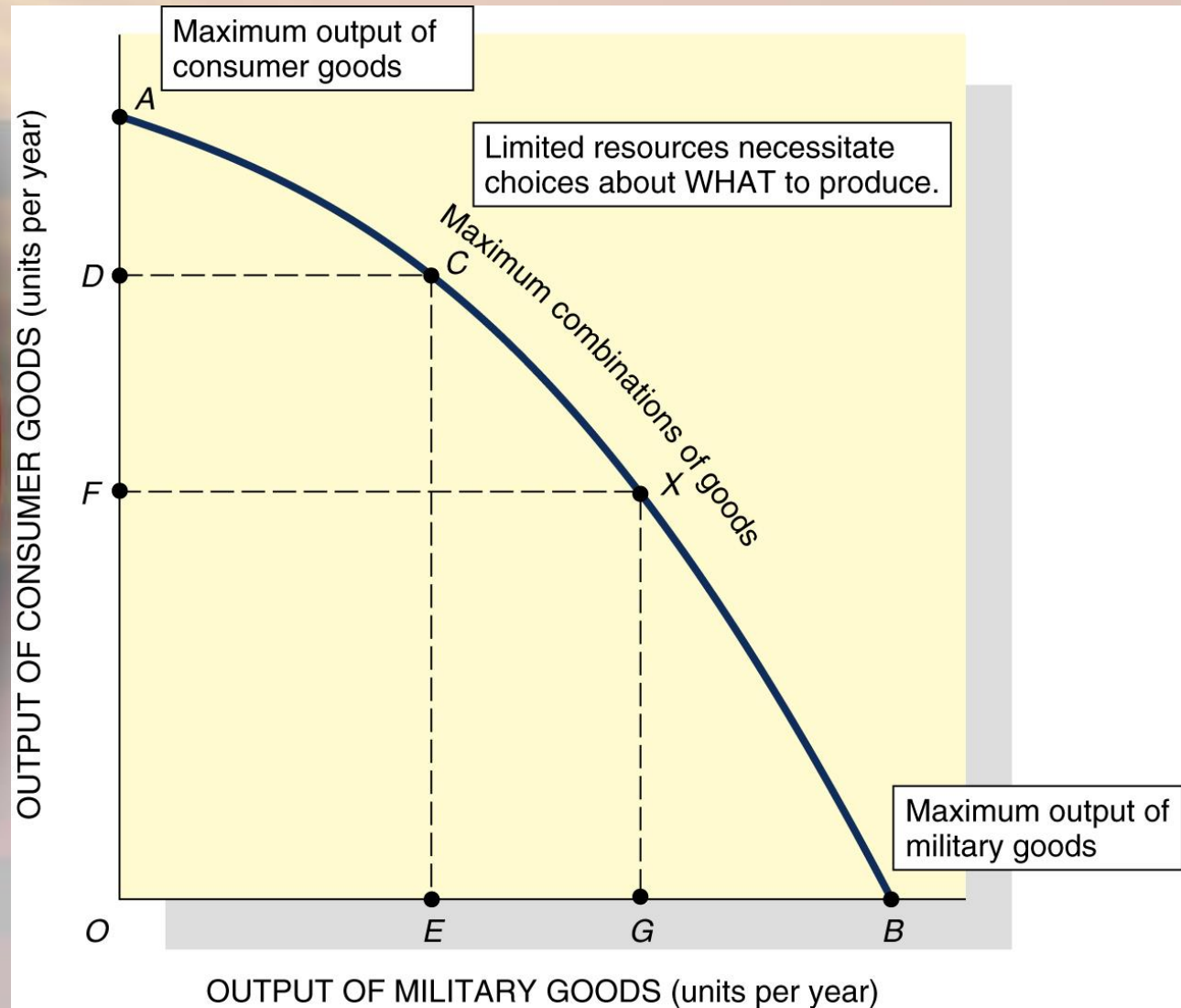
Production Possibilities

- How much we could produce depends on how many resources are available:
 - Land – including natural resources
 - Labor – number and skills of workers
 - Capital – machinery, buildings, networks
 - Entrepreneurship – skill in creating products, services, and processes

Production Possibilities

- *Production possibilities* – The alternative combinations of goods and services that could be produced in a given time period with all available resources and technology.

Production Possibilities Curve



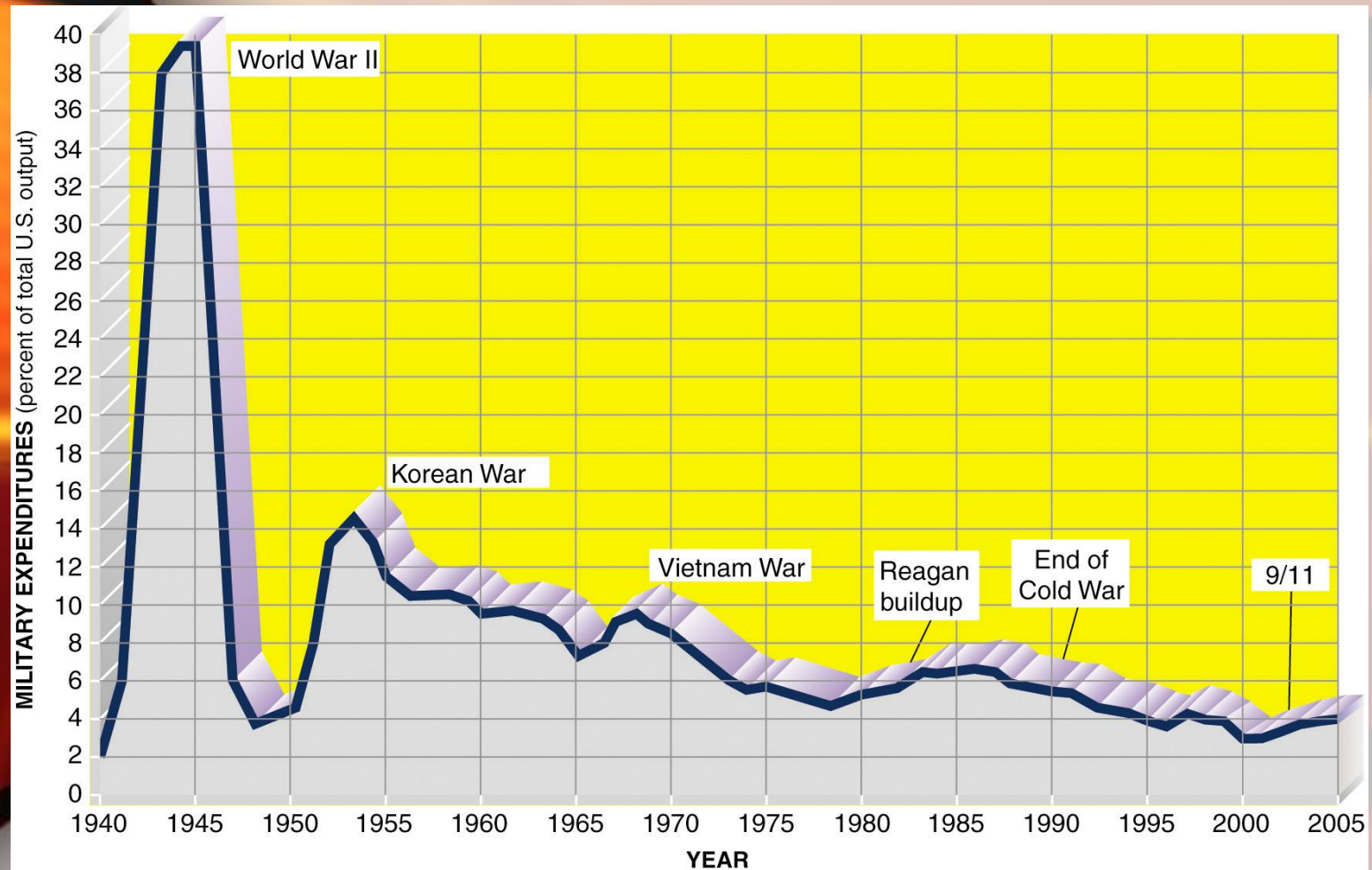
Specific Production Possibilities

Output	Possible Output Combinations					
	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>
Missiles	0	50	100	150	200	250
Houses	100	90	75	55	30	0

The Choices Nations Make

- A nation must choose what to do with its scarce resources during war or periods of military buildup.
- Produce military goods (“guns”) or consumer goods (“butter”)?

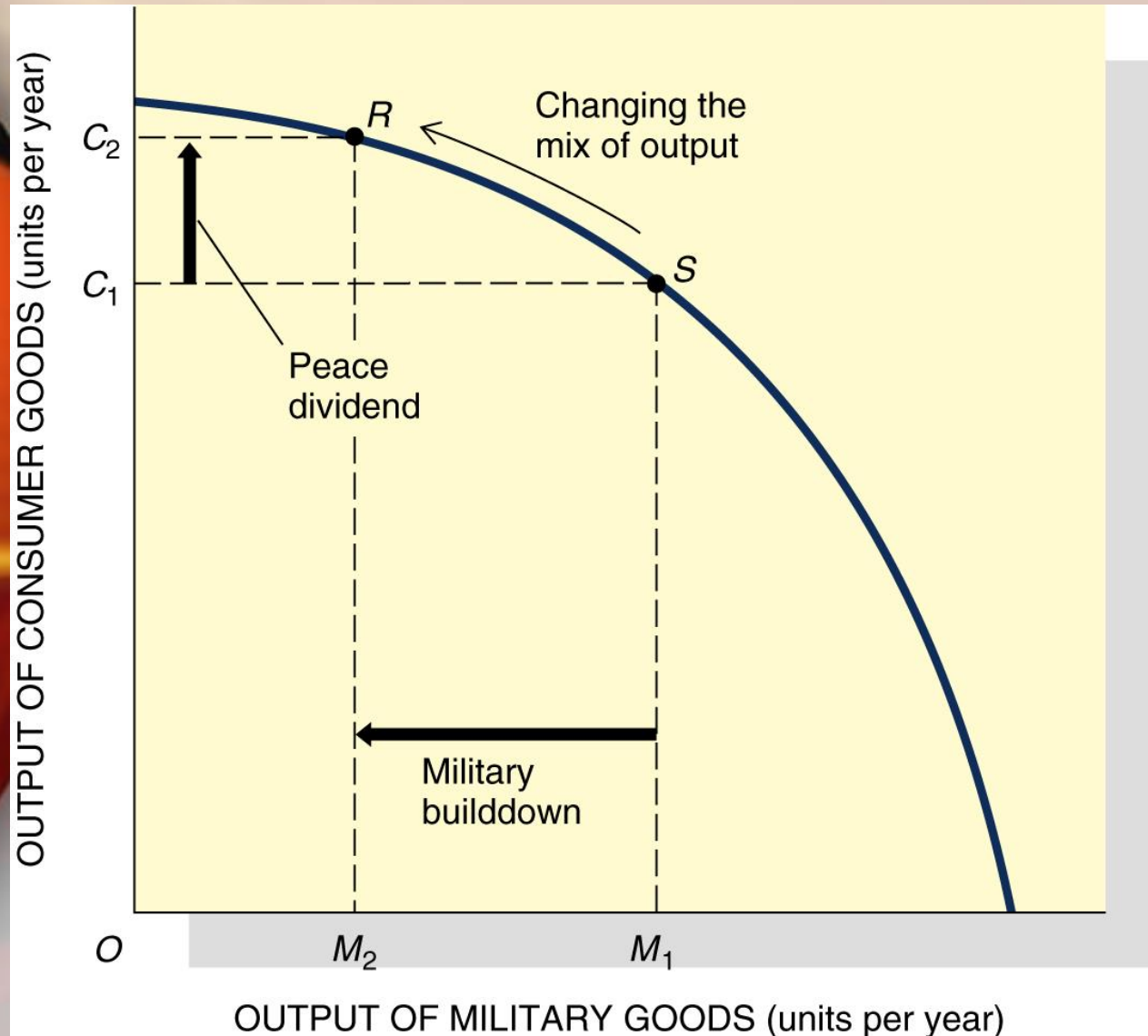
Military Share of Total U.S. Output



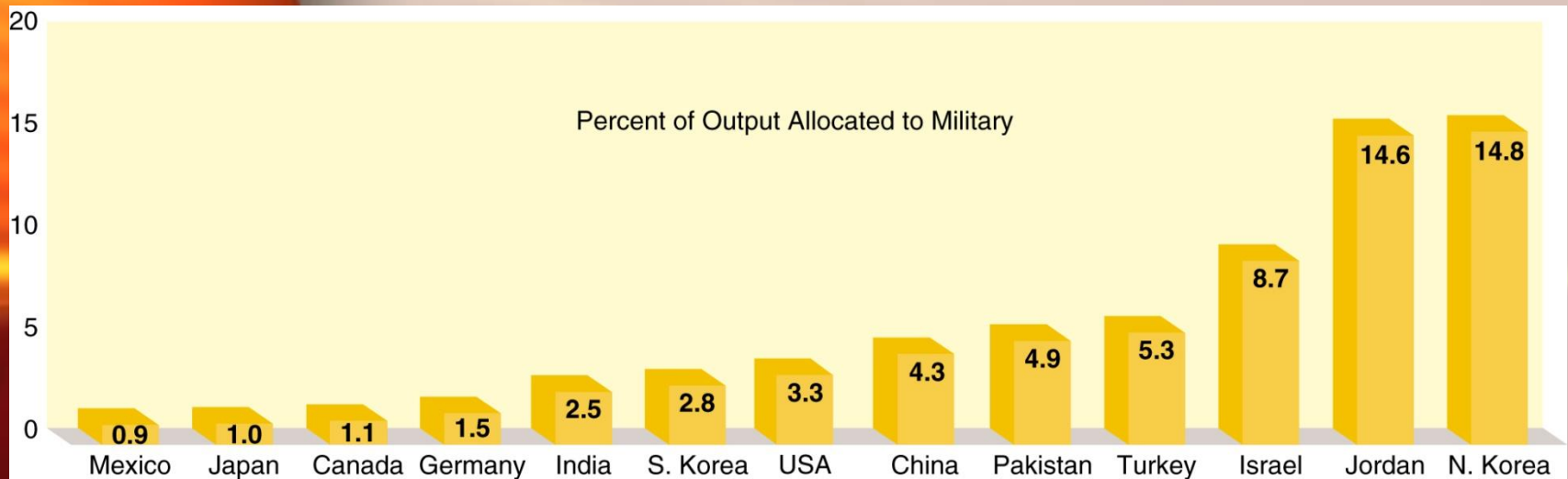
Peace Dividend

- Since the Korean War, the share of U.S. output allocated to the military has greatly *decreased*.
- The peace dividend is the increase in nonmilitary output due to a reduction in military spending.

The Cost of War



Percent of Output Allocated to Military



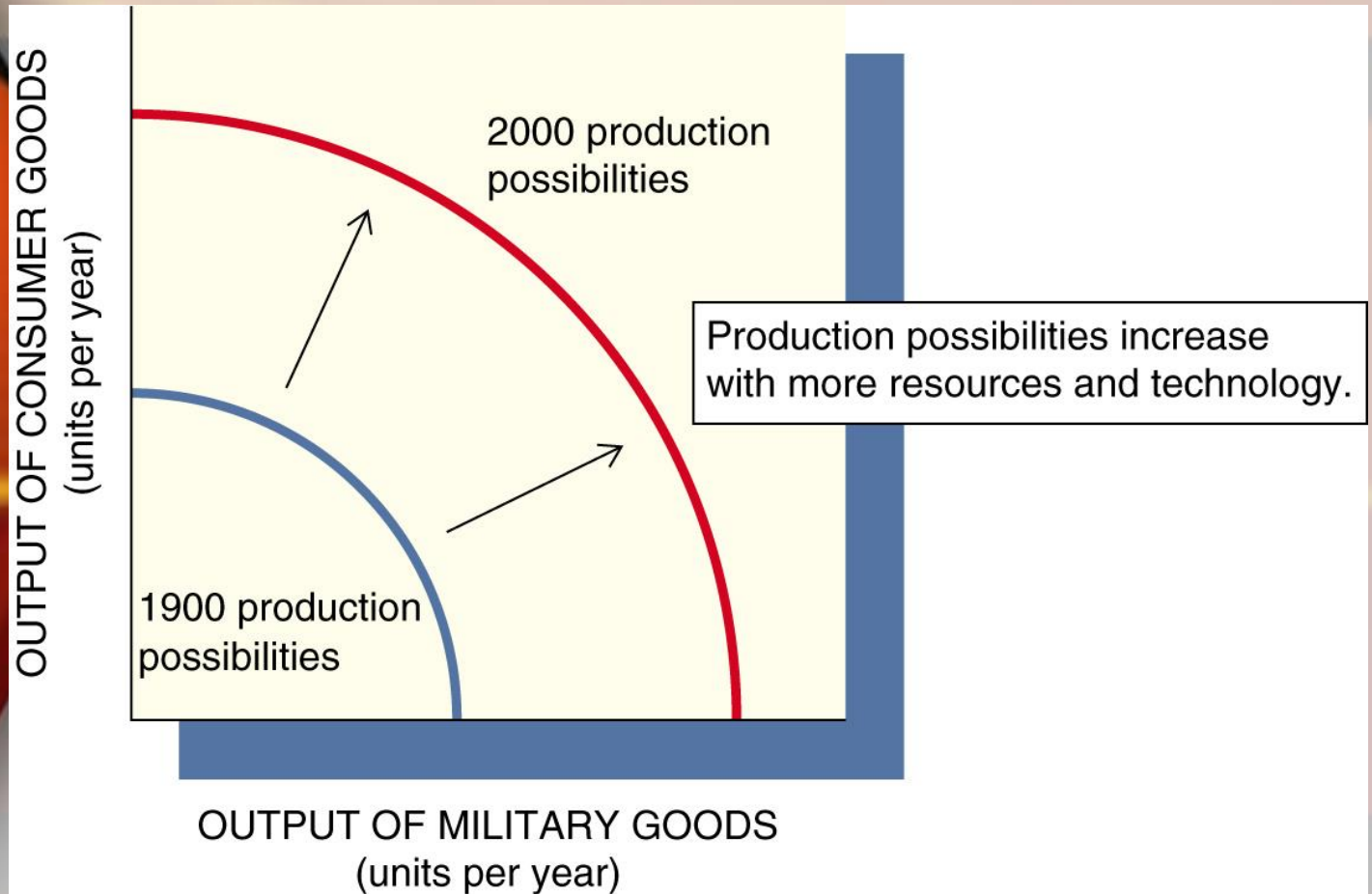
The Best Possible Mix

- There is only one best possible (optimal) mix of output at any given time.
- The first economic goal of any society is to produce that optimal mix of output.

Investment and Economic Growth

- Investment:
 - Expenditures on (production) of new plant and equipment (capital) in a given time period, plus changes in inventories.
- Economic growth:
 - An increase in output (real GDP).
 - An expansion of production possibilities outward.

Economic Growth



HOW to Produce

- The second economic goal for every society is to find an optimal method of producing goods and services.

FOR WHOM to Produce

- The for whom question focuses on how an economy's output is *distributed* across members of society.

FOR WHOM to Produce

- The economic pie can be divided in several ways:
 - Distribution based on productive contributions.
 - Distribution based on need.
 - Some combination of productive contributions and need.

Incentives

- Distribution based on need rather than work effort may result in less work effort.
- There is less output to distribute.
- The size of the pie may get smaller.

The Mechanisms of Choice

- There are conflicts and tradeoffs with every choice.

The Political Process

- Many basic economic decisions are made through the political process.

The Market Mechanism

- The use of market prices and sales to signal desired outputs (or resource allocations).
- Market sales and prices send a signal to producers about what mix of output consumers want.

The Market Mechanism

- *Laissez faire* is the doctrine of “leave it alone,” or nonintervention by government in the market mechanism.
- This concept is associated with Adam Smith.

Central Planning

- The government decides what goods are produced, at what prices they are sold, and who gets them.
- This concept is associated with Karl Marx.

Mixed Economies

- Economies that use both market and non-market signals to allocate goods and resources.
- This represents a combination of the other two systems.
- Most nations today are mixed economies.

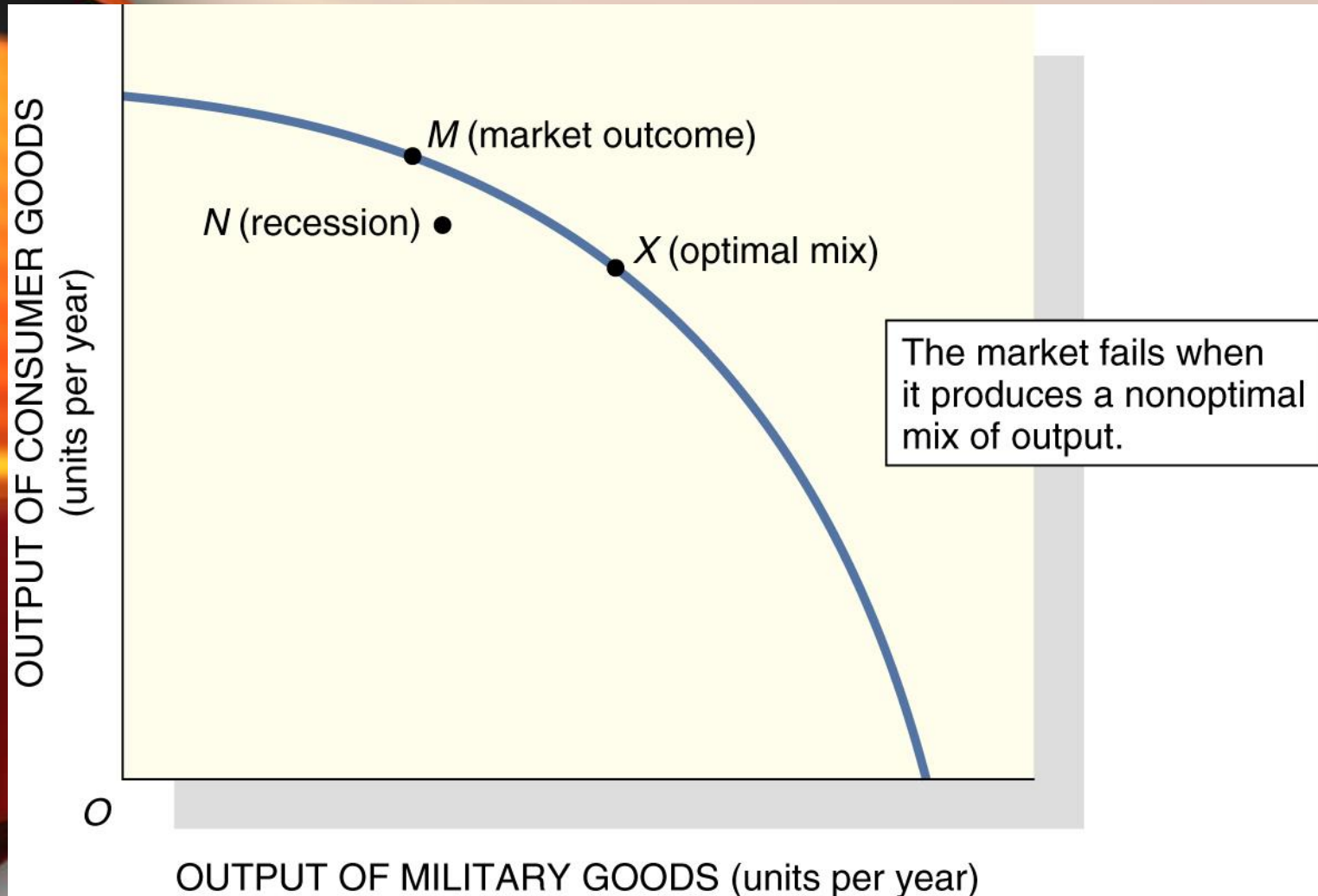
Undesirable Choices and Market Failure

- Markets don't always produce the "right" amount of output.
- Market Failure:
 - An imperfection in the market mechanism that prevents optimal outcomes.

The Wrong Mix of Output

- The market might produce too much of some products and too little of other products.
- The market might fail to make full use of the economy's production possibilities.

Market Failure



Too Much Pollution

- Markets might select the wrong choice of HOW to produce.
- May result in various forms of pollution.
 - Examples include air and water pollution.

Externalities

- Costs (or benefits) of a market activity borne by a third party.
- The difference between the social and private costs (or benefits) of a market activity.

Too Much Poverty

- Markets might fail to distribute goods and services in the best possible way.
- Taxes and income transfers may be used to reslice the economic pie.

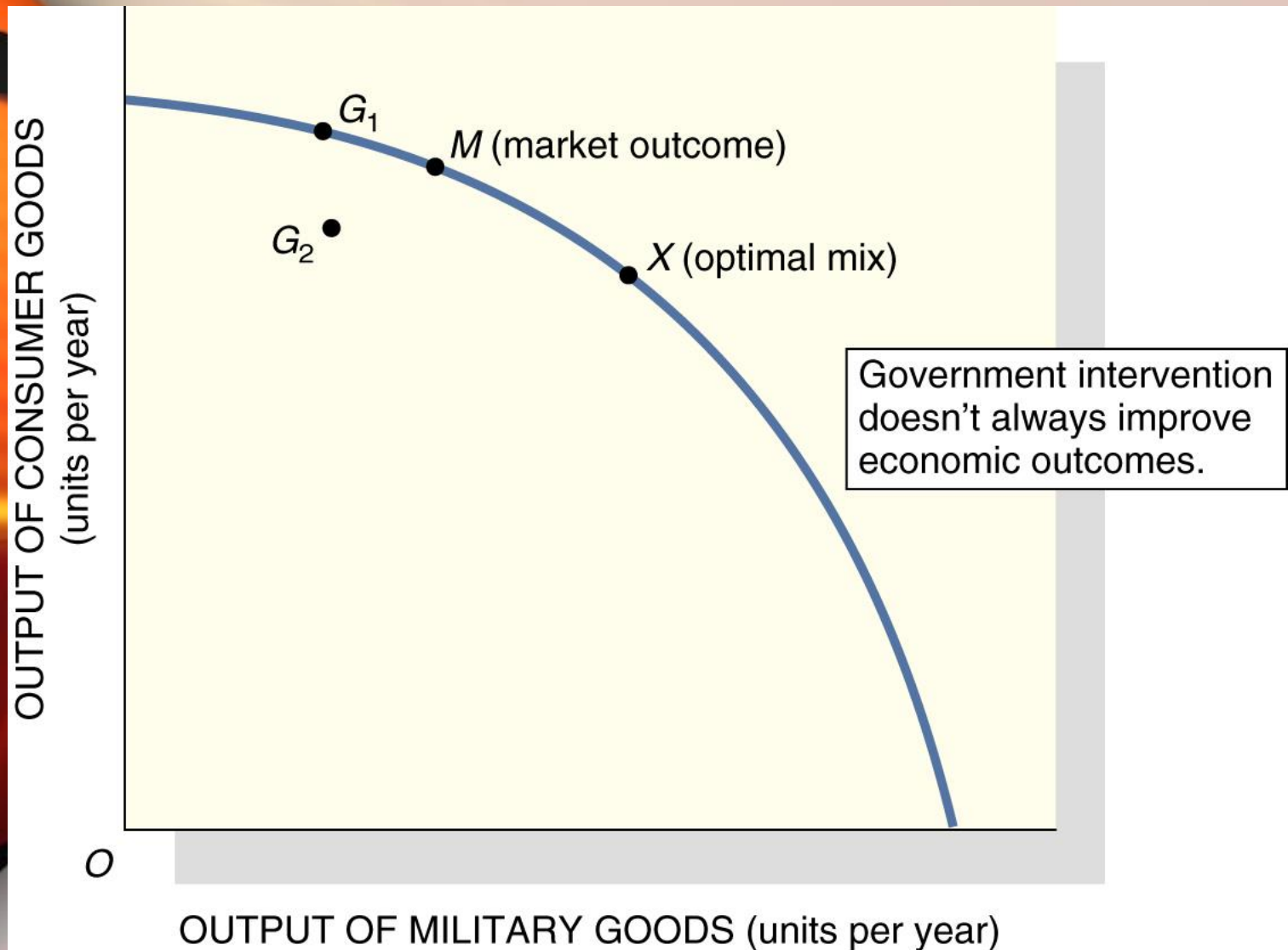
Government Failure

- Government intervention that fails to improve economic outcomes.
- Government will *not* necessarily offer better answers to the WHAT, HOW, and FOR WHOM questions.

Government Failure

- Government intervention might worsen the mix of output.
- It might even reduce the total amount of output through over-regulation.
- There is *no* guarantee that the visible hand of government will be any cleaner than the invisible hand of the marketplace.

Government Failure



What Economics Is All About

- A combination of market signals and government interventions forge better answers to the WHAT, HOW, and FOR WHOM questions.
- The first goal of economic theory is to help society find better answers to the three basic questions.

What Economics Is All About

- The second goal of economic theory is to *predict* how changes in government policy or market institutions will affect economic outcomes.

Economics: A Social Science

- Economics is a social science.
- Economists distinguish between two types of statement:
 - What *is*—*positive* statements
 - What *ought to be*—*normative* statements
- A positive statement can be tested by checking it against facts
- A normative statement cannot be tested.

Economics: A Social Science

- The task of economic science is to discover positive statements that are consistent with what we observe in the world and that enable us to understand how the economic world works.
- This task is large and breaks into three steps:
 - ◆ Observation and measurement
 - ◆ Model building
 - ◆ Testing models

Economics: A Social Science

- Observation and Measurement
 - Economists observe and measure economic activity, keeping track of such things as:
 - 1 Quantities of resources
 - 2 Wages and work hours
 - 3 Prices and quantities of goods and services produced
 - 4 Taxes and government spending
 - 5 Quantities of goods and services bought from and sold to other countries.

Economics: A Social Science

- Model Building
 - An **economic model** is a description of some aspect of the economic world that includes only those features of the world that are needed for the purpose at hand.
- Testing Models
 - We test models to reject those that don't fit the facts and identify the ones that do fit the facts.

Economics: A Social Science

- **Macro vs. Micro**
- *Macroeconomics* is the study of aggregate economic behavior, of the economy as a whole.
- *Microeconomics* is the study of individual behavior in the economy, of the components or pieces of the larger economy.

Economics: A Social Science

- Theory vs. Reality
- Reality is too complex to describe and explain in one course.
- Economists focus on basic relationships and use these to predict economic events and formulate economic policies.

Economics: A Social Science

- **Ceteris Paribus**
- Obstacles and Pitfalls in Economics
 - Economists cannot easily do experiments and economic behaviour has simultaneous causes.
 - To isolate the effect of interest, economists use the logical device called ***ceteris paribus*** or “other things being equal.”
 - Economists try to isolate cause-and-effect relationship by changing only one variable at a time, holding all other relevant factors unchanged.
- The assumption of nothing else changing.
- It is an important way of “thinking like an economist”.

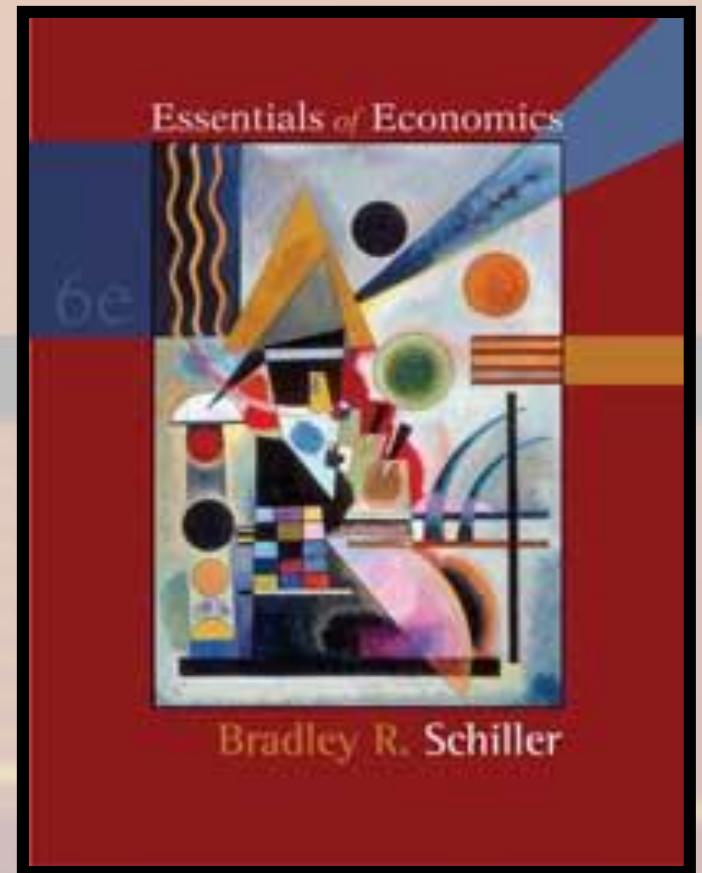
Politics vs. Economics

- Economic theory can make significant contributions to policy formulation.
- All policy decisions are ultimately a mix of politics and economic theory.

Modest Expectations

- The goals of this course are modest:
 - Develop a reasonable perspective of economic behavior.
 - Acquire an understanding of basic principles.
- You should then have a better view of how the economy works.

The Challenge of Economics



End of Chapter 1