MANKIW'S TEN PRINCIPLES OF ECONOMICS

“Remember, an economic boom is usually followed by an economic kaboom.”

Principle #1: People Face Tradeoffs

- All decisions involve trade offs. To get one thing we like, we usually have to give up another thing we like.
  - Playing basketball or studying for an exam
  - Environmental protection or economic growth
- Milton Friedman: “There is no such thing as a free lunch”

Principle #1: People Face Tradeoffs

- Society faces an important tradeoff: **Efficiency** vs. **Equality**
  - **Efficiency:** when society gets the most from its scarce resources
    - "the size of the pie"
  - **Equality:** when prosperity is distributed uniformly among society's members
    - "how the pie is divided"
- Tradeoff Example: Progressive Income Tax, Welfare

Principle #2: The Cost of Something Is What You Give Up to Get It

- Making decisions requires a comparison of costs and benefits across alternatives
- The **opportunity cost** of an item is equal to the value of what must be foregone to obtain it
- Opportunity cost is the relevant cost for decision making

Principle #3: Rational People Think at the Margin

- **Rational** people systematically and purposefully do the best they can to achieve their objectives, given the available opportunities.
- A rational person makes decisions by comparing **marginal benefit** and **marginal cost**.
  - As opposed to comparing average benefit and average cost.
- A rational person does not consider **sunk cost** in decision making.

Principle #4: People Respond to Incentives

- **Incentive:** something that induces a person to act, such as the prospect of a punishment or reward.
  - When gas taxes rise, people use public transportation, and travel less.
  - When interest rates rise, people save more and consume less.
- Steven Landsburg: "Most of economics can be summarized in four words: 'People respond to incentives.' The rest is commentary."

Principle #5: Trade can make everyone better off

- Rather than being self-sufficient, people can **specialize** in producing one good or service and exchange it for another.
  - Consider a world in which every person has to grow her own food, makes her own clothing, performs her own surgeries, etc.
- Countries also benefit from trade and specialization.

Principle #6: Markets Are **Usually** A Good Way to Organize Economic Activity

- **Market Economy** allocates resources through the decentralized decisions of many households and firms as they interact in markets for goods and services.
- Famous insight by Adam Smith in *The* Wealth of Nations (1776): Each of these households and firms acts as if "*led by an invisible hand*" to promote general economic well-being.

Principle #6: Markets Are **Usually** A Good Way to Organize Economic Activity

- The **Invisible Hand** works through the price system:
  - The interaction of buyers and sellers determines prices.
  - Each price reflects the good's value to buyers and the cost of producing the good.
  - Prices guide self-interested households and firms to make decisions that, in many cases, maximize society's economic well-being.

Principle #7: Governments Can Sometimes Improve Market Outcomes

- Government's role in improving market outcomes:
  - **Enforce property rights** (with police, courts)
    - People are less inclined to work, produce, invest, or purchase if large risk of their property being stolen.

Principle #7: Governments Can Sometimes Improve Market Outcomes

- Government's role in improving market outcomes:
  - **Address market failure and promote efficiency**
    - **Market failure**: when the market fails to allocate society's resources efficiently.
    - <u>Causes of market failure</u>:
      - **Externalities**: the production or consumption of a good affects bystanders (e.g. pollution)
      - **Market power**: a single buyer or seller has substantial influence on market price (e.g. monopoly)

Principle #7: Governments Can Sometimes Improve Market Outcomes

- Government's role in improving market outcomes:
  - **Promote equity**
    - If the market's distribution of economic well-being is not desirable, tax or welfare policies can change how the economic "pie" is divided.

Principle #8: A Country's Standard of Living Depends on Its Ability to Produce Goods & Services

- Variation in living standards is mainly attributable to differences in countries' **productivity**: the quantity of goods and services produced from each unit of labor input.

Principle #9: Prices Rise When the Government Prints Too Much Money

- **Inflation:** increases in the general level of prices
- In the long run, excessive growth in the quantity of money leads to inflation, which causes the value of money to fall.

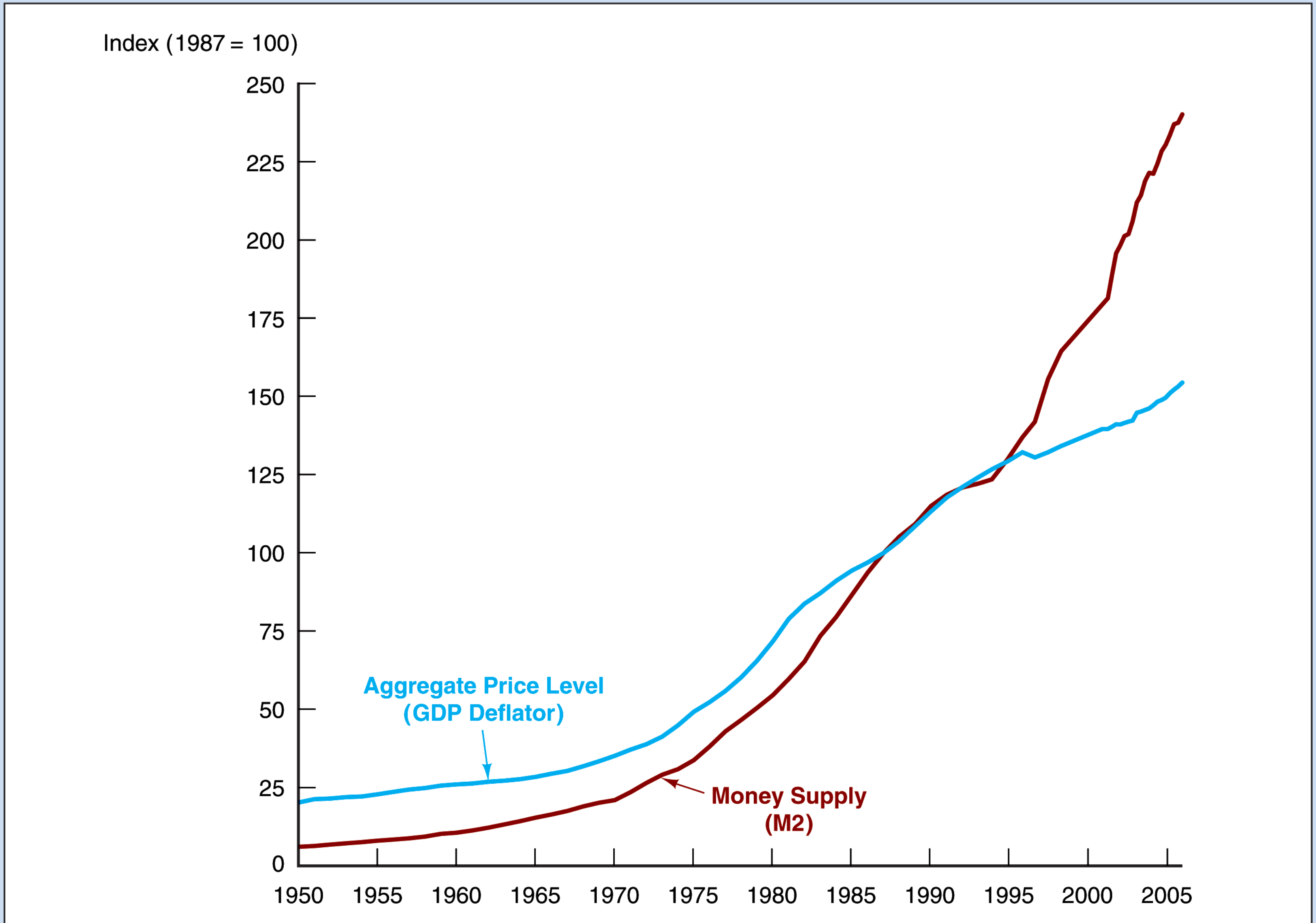


FIGURE 5 **Aggregate Price Level and the Money Supply in the United States, 1950–2005**

Sources: www.stls.frb.org/fred/data/gdp/gdpdef; www.federalreserve.gov/releases/h6/hist/h6hist10.txt.

Hyperinflation

- Weimar Germany: Aug 1922 – Dec 1923
  - To pay for reparations as a result of its defeat in WWI
  - Daily inflation rate: 21%, price doubled every 3 days
  - Daily In January 1921, a daily newspaper in Weimar Germany cost 0.3 marks. Two years later, in Nov 1922, the same newspaper cost 70,000,000 marks.

Hyperinflation

- Zimbabwe: March 2007 – Nov 2008.
  - Robert Mugabe's land reforms of 2000-2001: land was expropriated largely from white farmers and redistributed to the majority black populace.
  - Economic decline + huge government deficits led the government to resort of monetization of its debt
  - Daily inflation 98%, prices doubled every 25 hours

Hyperinflation

Hyperinflation

- China: Oct 1947 – May 1949
  - To fund the civil war, the Nationalists resorted to running huge budget deficits, which they eventually looked to cover by printing money
  - Daily inflation 14%, prices doubled every 5 days

China's paper money experiment

- The Chinese were the first to use paper money.
- In 806 – 821, during the reign of Emperor Hien Tsung of the Song Dynasty, a severe shortage of copper for making coins caused the emperor to issue paper money notes, made from mulberry bark.

Jiaozi (Song Dynasty), the world's earliest paper money.

China's paper money experiment

- In 1020, quantity of Chinese paper money reached an excessive level. The total amount was nominally worth 2,830,000 ounces of silver. Vast amounts of cash were used to buy off potential invaders from the north and to pay for imports causing a cash famine. As a result the authorities increased the note issues thus fuelling inflation.
- In 1455, China abandoned paper money. After well over 500 years of experience with paper currencies, during which there had been repeated episodes of inflation and currency reform, China ceased to use paper money.

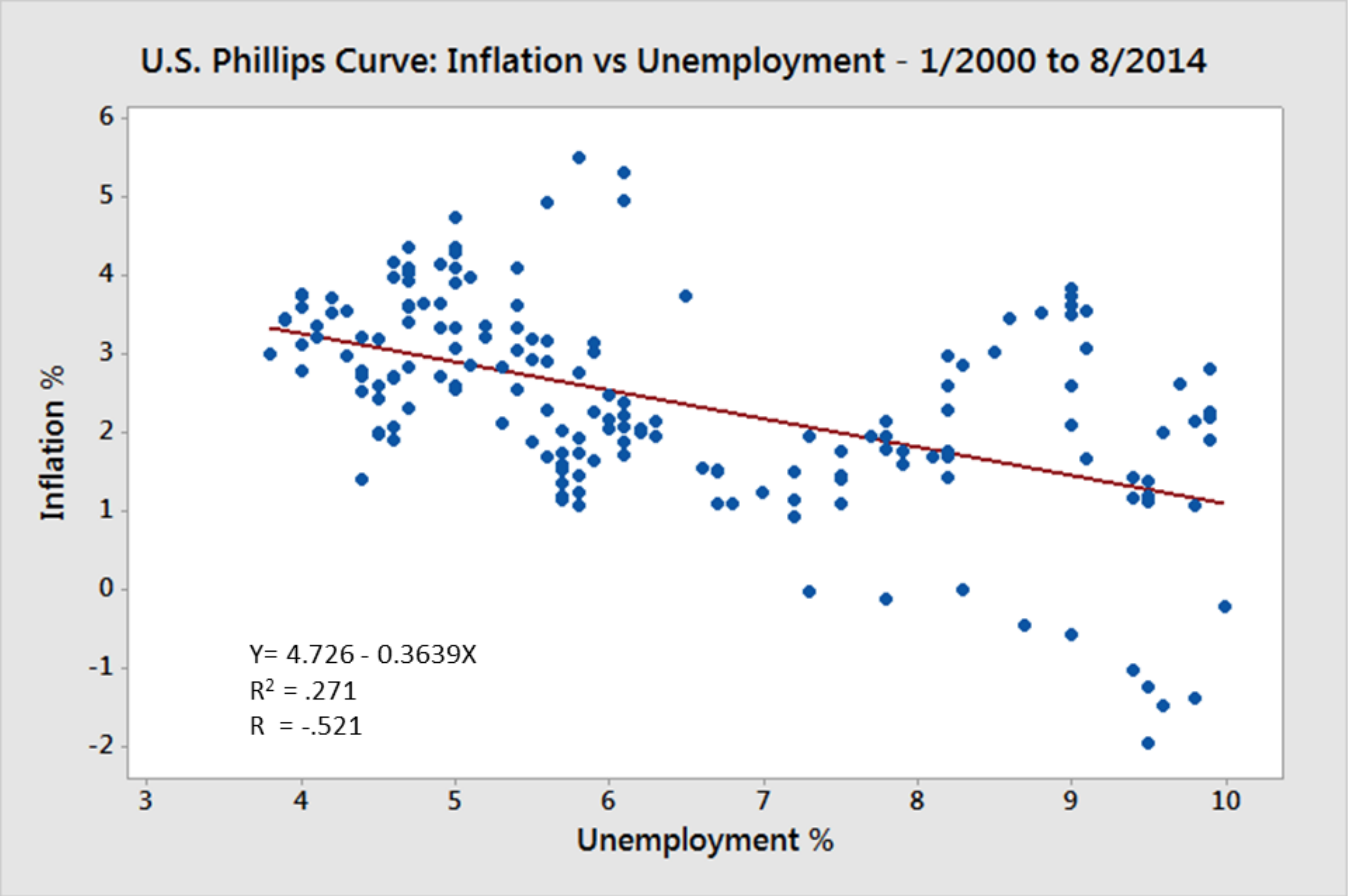
Principle #10: Society Faces a Short-run Tradeoff Between Inflation and Unemployment

- In economic booms, demand is strong relative to the economy's capacity to produce.
- Higher demand may cause firms to raise their prices. It also encourages them to hire more workers and produce a larger quantity of goods and services, which results in higher wages and lower unemployment.

Principle #10: Society Faces a Short-run Tradeoff Between Inflation and Unemployment

- Central banks can stimulate demand through monetary injections.
- As prices and wages are not set every day, how much firms would raise their prices and how much workers would demand higher wages also depend on their expectations of future inflation.
  - As a result, **inflation today depends on expected inflation in the future.**
- *Holding inflation expectations constant*, society typically faces a short-run tradeoff between inflation and unemployment.

Principle #10: Society Faces a Short-run Tradeoff Between Inflation and Unemployment



Just for fun

- Mankiw's Ten Principles of Economics, Translated