

Public Economics

Level 2

2020-2021

Conférence de méthode

Session 3

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SciencesPo

Semester's plan

Session 1 : introduction
& maths recaps

Session 2 : research in economics
& a look at taxation

Session 3: concentrated markets
& informational problems

Send an email with your group's composition

**MARKET
FAILURES**

Session 4: externalities

Send an email with your group's topic

handing of written report (November 23)

Session 5: public goods

Session 6: group projects presentations
(December 2 / 9)

Content of the 3rd session

1. Market power

1. Small complements to the lecture
2. Exercise 1: monopoly

2. Game theory & moral hazard

1. Small complements to the lecture on game theory
2. Exercise 2: moral hazard and game theory

3. Research article discussion: insurance

1. Paper 1: Cohen & Dehejia (2004) about car insurance and risk
2. Paper 2: Sommers et al. (2013) about Obamacare and access to care (if we have time)

1. Market power

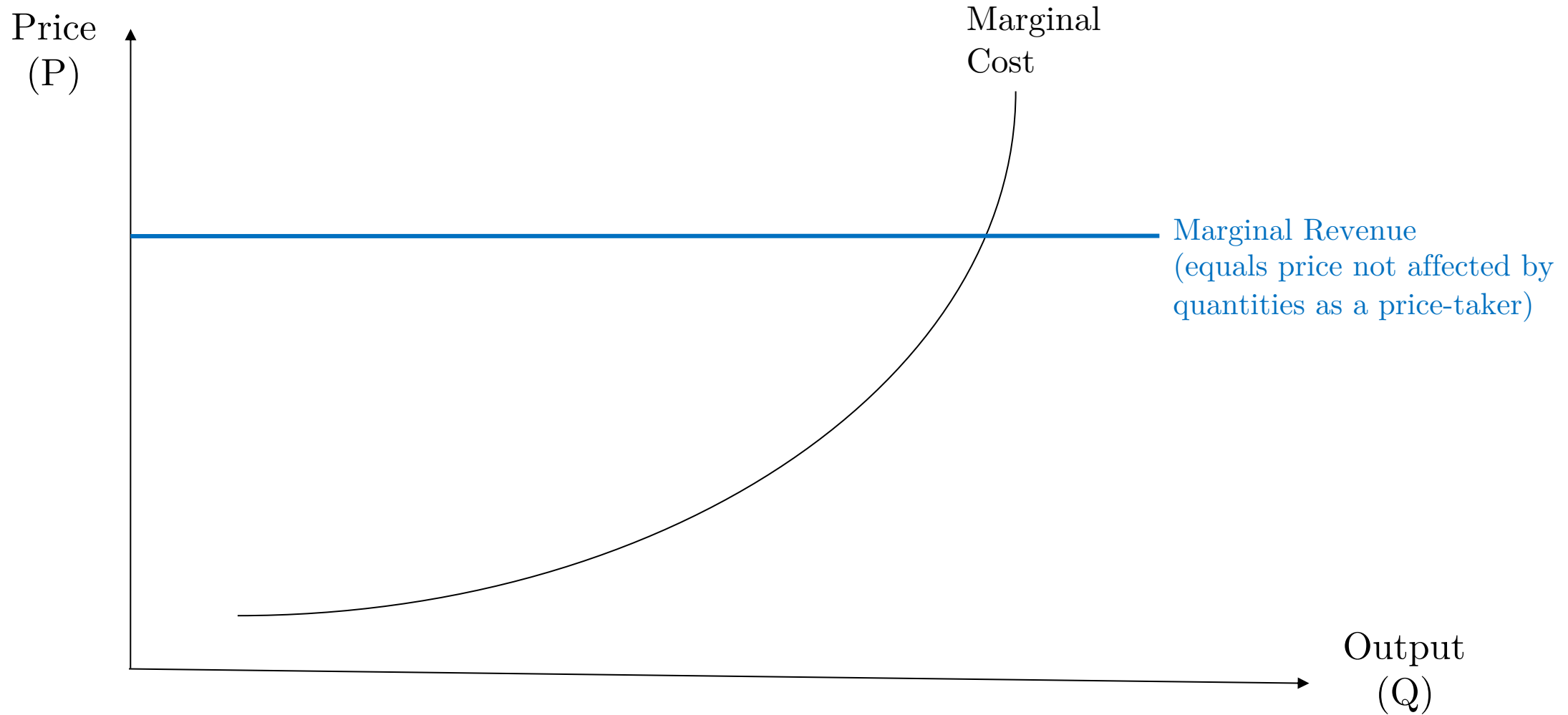
1. Short recap on monopoly

2. Quantitative exercise 1: monopoly

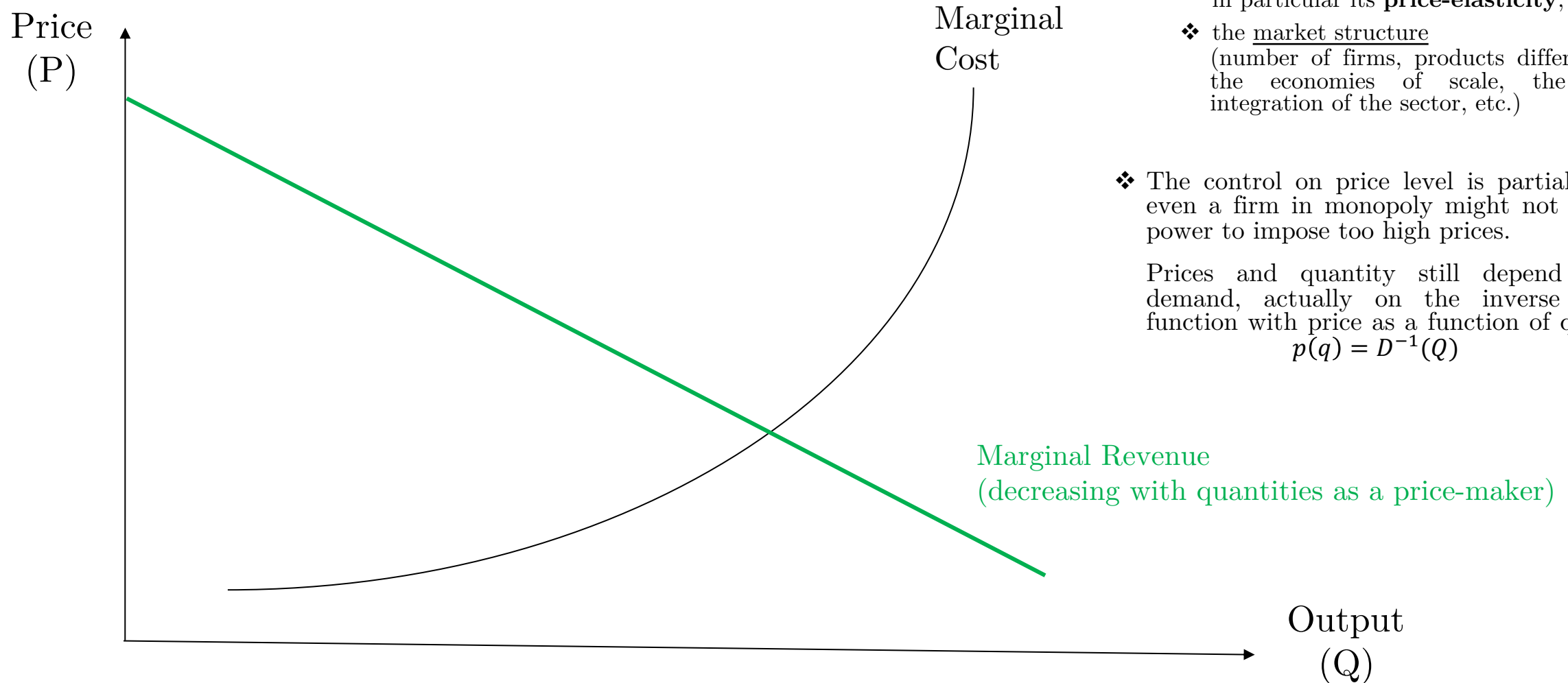
Perfect/Imperfect competition

- ❖ In **perfect** competition, firms are price takers
- ❖ In an **imperfectly** competitive market, firms influence prices
 - ❖ The lower demand is sensitive to prices, the greater the market power
- ❖ Objective of the firm: **maximize its profits**

Perfect competition



Imperfect competition



- ❖ The shape of the **marginal revenue curve** under imperfect competition depends on:
 - ❖ the cost structure of the firm;
 - ❖ the aggregate demand from consumers and in particular its **price-elasticity**;
 - ❖ the market structure (number of firms, products differentiation, the economies of scale, the vertical integration of the sector, etc.)
- ❖ The control on price level is partial because even a firm in monopoly might not have the power to impose too high prices.

Prices and quantity still depend on the demand, actually on the inverse demand function with price as a function of quantities

$$p(q) = D^{-1}(Q)$$

Monopoly

- ❖ Same **maximization principle**

- ❖ Maximize profit (revenue - costs)

- ❖ Marginal analysis : *marginal benefit = marginal cost*

- ❖ A **price/quantity trade-off**

- ❖ The price is adjustable

- ❖ **Higher prices** mean **more margins** on each unit **but less quantity**, and *vice versa*

Monopoly

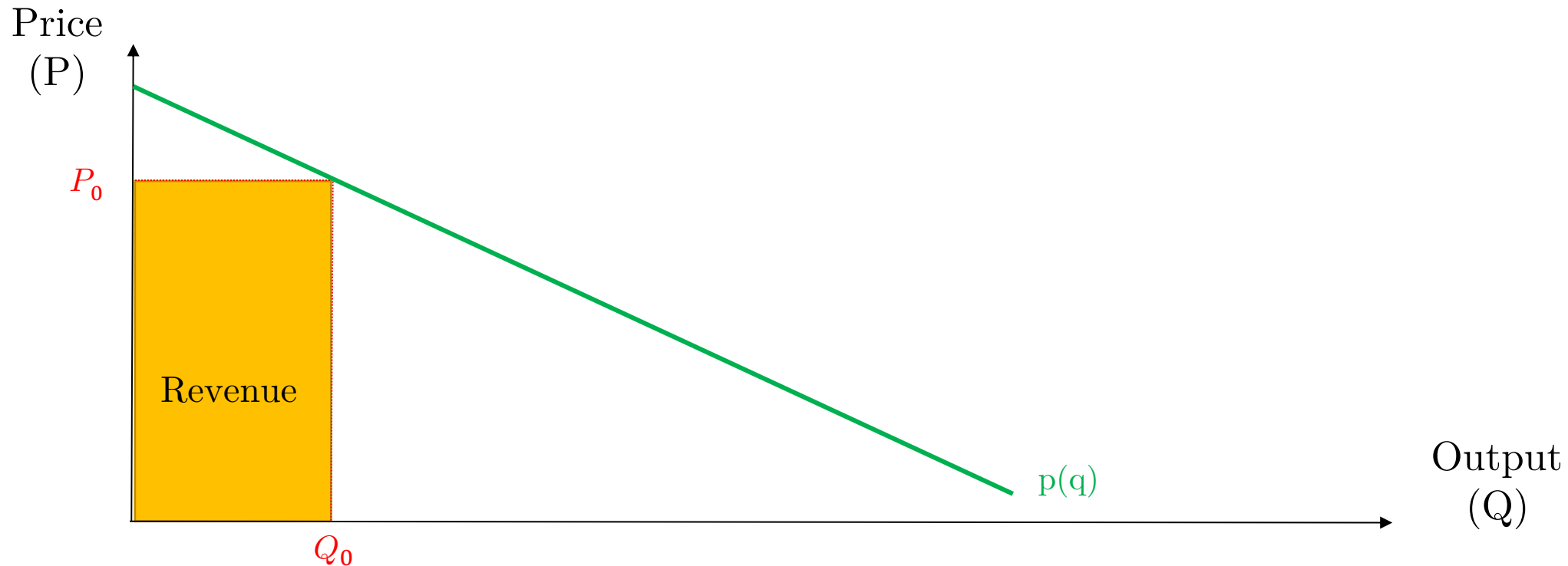
❖ Revenue of the firm

❖ Under perfect competition: $R(q) = p \times q$

❖ Under a monopoly: $R(q) = p(q) \times q$

Price depends on quantity

The optimization of the monopoly is therefore about choosing quantity



Monopoly

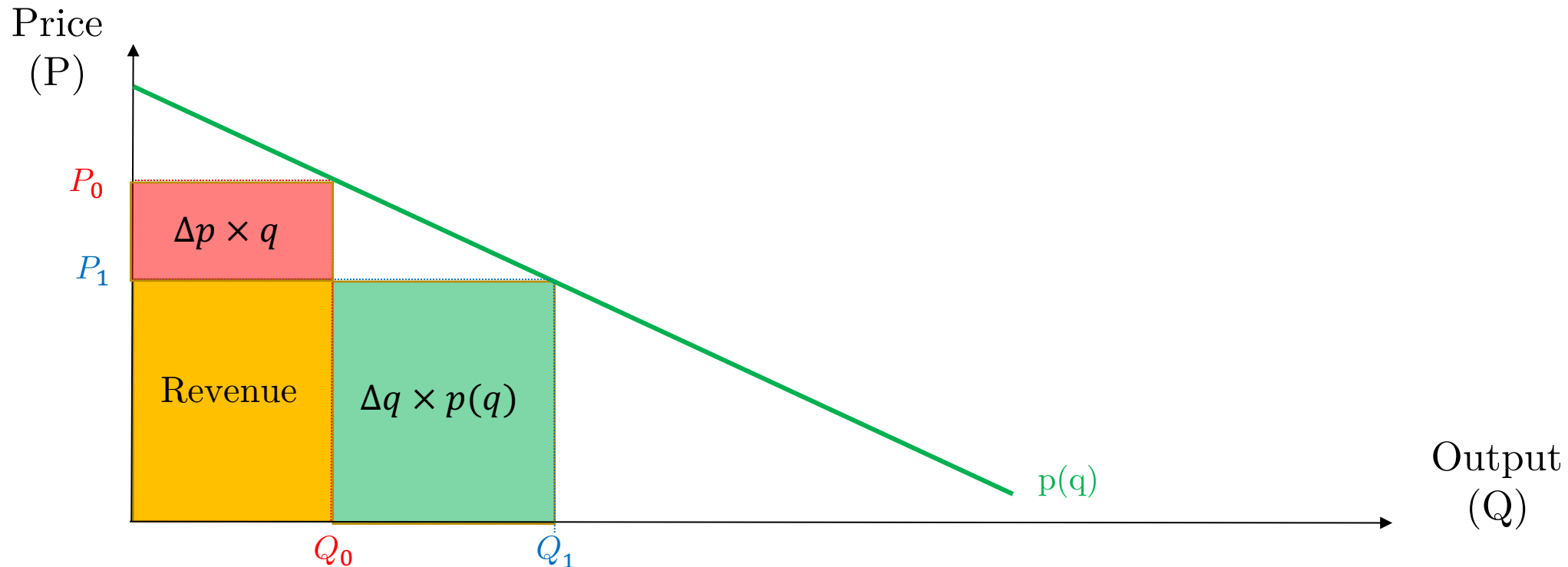
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Marginal revenue of the monopoly

❖ The marginal revenue is the derivative of the revenue

$$❖ R(q) = p(q) \times q$$

$$❖ MR(q) = p(q) + p'(q) \times q$$

$$(uv)' = uv' + u'v$$

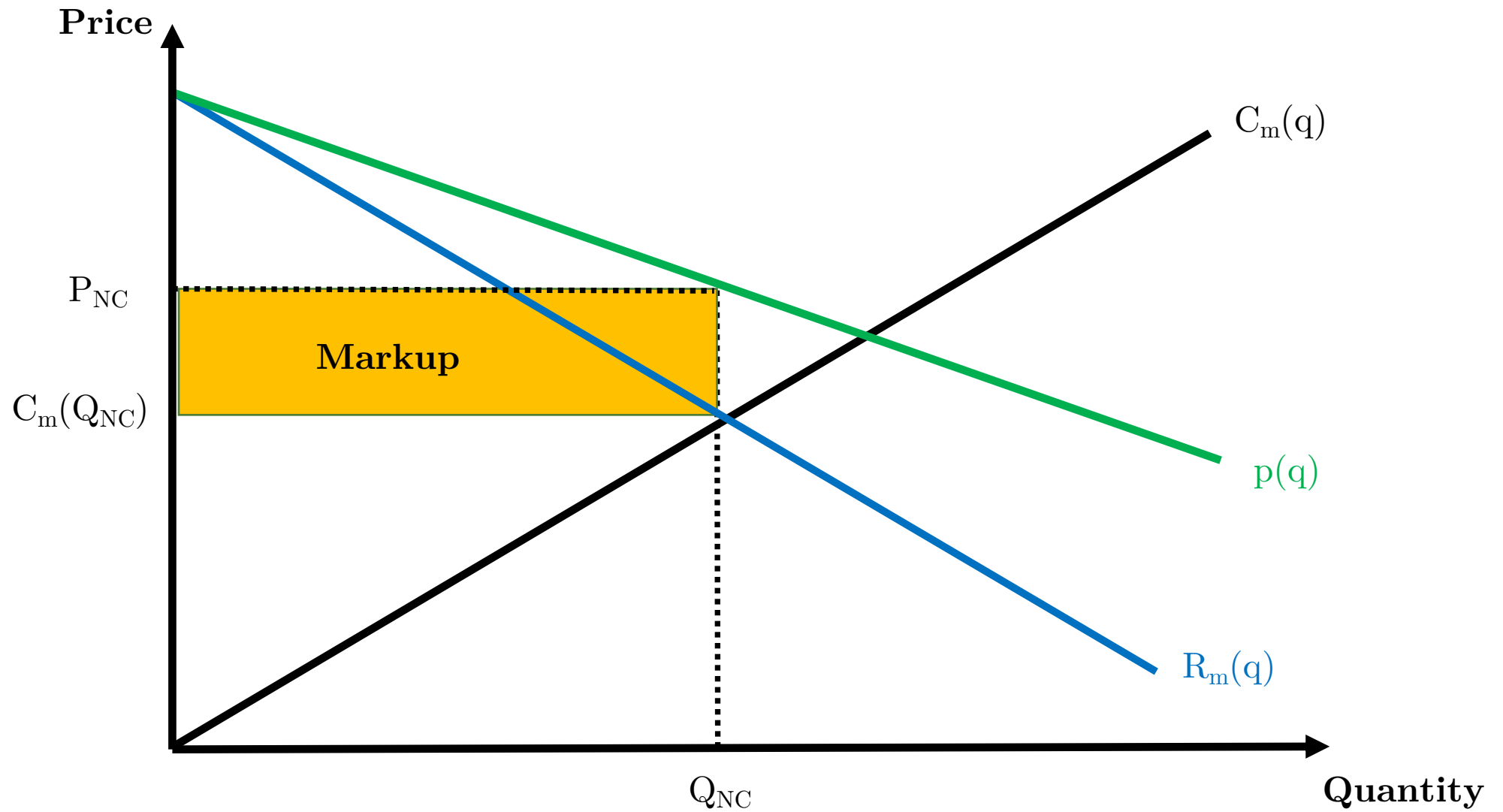
❖ $p'(q) < 0$ (as price must be \searrow to \nearrow quantities; dependent on demand)

If the monopoly produces one additional unit, it can **sell it at the price $p(q)$** but must **lower the price of each previously produced unit by $p'(q)$**

❖ Therefore, the **marginal revenue curve lies below the price curve**

The firm will produce a **markup** :
quantities \times (*price* – *marginal cost*)

Markup of the monopoly



Markup of the monopoly

- ❖ The **less price-elastic** the demand, the **higher** will be the markup
When quantities \nearrow , price \searrow slowly
- ❖ The **monopolist still makes profit on the last unit sold**, because marginal cost remains below price
- ❖ Part of the **consumption is excluded from the market**, with consumers ready to pay more than marginal cost but less than price

1. Market power

1. Short recap on monopoly

2. Quantitative exercise 1: monopoly

2. Game theory & moral hazard

1. Short recap and complements on game theory
2. Quantitative exercise 2: moral hazard & game theory

Game theory

In perfect competition, as well as in a monopoly, there is no room for interaction between producers.

In situations in between, such as an oligopoly, strategic interactions between firms might be represented by strategic games.

Principle of game theory

- ❖ Simplify situation to **understand interactions**. With a finite set of players (Coca-Cola company, Pepsi, etc.), there are:
 1. **Strategy** sets for all players
 2. **Payoffs** functions
 3. **Timing** (simultaneous/sequential; unique or repeated; finite/infinite iterations)

- ❖ Two **assumptions** (can be relaxed at the cost of added complexity):
 1. Players are **rational**: they **maximize their own expected payoffs**
(The objective is not to have more than the other player but indeed to maximize its own payoff)
 2. Players **know** the characteristics of the strategic situation they are involved in (**parameters of the game**). Players are somehow **omniscient**.

Strategies

- ❖ **Dominant** vs **dominated** strategies
 - ❖ A **dominant** strategy gives the **highest payoff regardless** of the other player's choices
 - ❖ A **dominated** strategy yields **lower payoffs than at least one other strategy**
 - ❖ There isn't always dominant, nor dominated strategies
- ❖ The **best response strategy** is the strategy (or mixed-strategies) which produces the most favorable outcome for a player, taking other players' strategies as given
 - ❖ If there is one, the best response is always the dominant strategy
- ❖ **Equilibrium**
 - ❖ If **both players have dominant strategies**, they will play those.
 - ❖ If **only one player** has a **dominant strategy**, the **other player understands** his incentives and concentrates on the part of the game that really matters.
 - ❖ When there are **no dominant strategies**, there may anyway be an equilibrium based on **best responses**

Nash equilibrium

- ❖ In a NE, each player's played strategy is his **best response** to the other players' strategy
- ❖ Player have **no incentive to shift strategies**.

Essentials of Games: Summary

- ❖ When you have a dominant strategy, you should always use it.
- ❖ When you know your opponent has a dominant strategy you can concentrate only on one part of the game.
- ❖ If you cannot solve the game that way, you need to rely on a Nash equilibrium through best responses

2. Game theory & moral hazard

1. Short recap and complements on game theory
2. Quantitative exercise 2: moral hazard & game theory

3. Research articles: insurance

Paper 1: Cohen & Dehejia (2004) about **car insurance** and **risk**

Paper 2: Sommers et al. (2013) about **Obamacare** and **access to care**
(if we have time)

Start with 2 definitions

group A/B not yet the lecture

Adverse selection:

presence of bad elements drive the good ones out of market

Arises when asymmetry of info. (cannot distinguish good from bad or ugly...)

Akerlof, *Market for lemons*



"I'll even throw in 30 days free towing."

Moral hazard:

Behavior of one party is not internalizing the costs other parties will bear from the consequences of his own actions. Many times, incentives change after contractualizing (insurance, banks too big to fail, etc.).



Too big to fail & banks' incentives

Questions?

- ❖ If a **driving insurance was not compulsory**, **would you contract such an insurance?** Why would you or why would you not?
- ❖ If a car insurance becomes compulsory, in what aspects could your **behaviour vary:**
 - ❖ if you are not insured?
 - ❖ if you are insured?
 - ❖ if liability does not vary with the responsibility in an accident?
 - ❖ as a potential person responsible, as a potential victim?

Insurance and moral hazard

Cohen & Dehejia (2004)

"The Effect of Automobile Insurance and Accident Liability Laws on Traffic Fatalities"

The Journal of law and Economics

Car accidents and fatalities in the US

- ❖ A **human cost**: over 40k deaths / year
- ❖ A **financial cost**: ~100 billions \$ in insurance premia / year
& over 250 billions \$ in uninsured accidents costs / year

=> What should the State do?

Insurance as a response

May be suboptimal for two reasons:

- ❖ **Ex-ante:** individuals will not necessarily contract an insurance, although costs would be dramatic if an accident occurs
- ❖ **Ex-post:** moral-hazard for individuals knowing they would not bear the full cost of an accident

Two aspects studied in the paper

Compulsory insurance:

Anyone owning a car must contract an insurance covering **the compensation of potential injured from accidents**. This forces drivers to internalize part of the externality that results from the risk of driving.

US context: first introduced in 1927 in Massachusetts

No fault system:

Historically, drivers were liable for losses to others that resulted from their negligent behavior. But due to court costs, delays and difficulties in always establishing negligence, there was a move towards **offering protection against injuries in automobile insurance regardless of fault**.

US context: first introduced in 1971 in Massachusetts

Cohen & Dehejia (2004) – paper

- ❖ Effect of compulsory insurance and no-fault on behaviors and therefore fatalities
- ❖ Panel data in 50 US States and the Columbia district 1970-1998; quasi-natural XP with evolution of
 - ❖ Compulsory insurance
by 1975: 22 States with compulsory ins.; by 1997: 45 States
 - ❖ No-fault laws
by 1975: 16 States; by 1997: fell to 14 (with some entering, some exiting)

Predictions: theoretically ambiguous = need to be empirically tested

H1: If a compulsory insurance is enforced:

1. The **uninsured part or the population** \searrow
2. Those who **switch** from uninsured to insured take **more risks** and \nearrow **fatalities**
3. Those **remaining uninsured** take **less risks** and \searrow **fatalities** (because illegal driving)

H2: No-fault system:

1. Insured individuals: \searrow liability, implying \nearrow **fatalities**
2. Uninsured indiv.
 - a. in fault: \searrow liability (because no extra trial as fault does not matter) \Rightarrow \nearrow **fatalities**
 - b. victim: \searrow compensation \Rightarrow \nearrow caution \Rightarrow \searrow **fatalities**

H3: The more uninsured remaining, the less fatalities

Instrumental variable approach

- ❖ Use therefore the **compulsory aspect of insurance as an instrument for the number of uninsured individuals.**
(compulsory laws affect the nb. of insured individuals but not fatalities directly)
- ❖ Required because risk of **simultaneity**
 - ❖ traffic fatalities depend on the number of insured drivers (moral hazard);
 - ❖ drivers choose insurance status based on the rate of traffic fatalities.
- ❖ What is needed is that the **States choosing to implement such laws are not specific or to account for this specificity:**
 - ❖ States are **indeed specific** (more violent, differently insured previously, etc.)
 - ❖ Therefore **controls** for age, ethnicity, income, etc.
 - ❖ And **State and time fixed effect** to tackle the possibility that States implementing such laws are those with a higher level of fatalities

Results

H1: If a compulsory insurance is enforced:

1. The **uninsured part of the population** \searrow
2. Those who **switch** to insured \nearrow risks and \nearrow fatalities
3. Those **remaining uninsured** \searrow risks and \searrow fatalities

Confirmed

No conclusive results

No conclusive results

H2: No-fault system

1. Insured individuals: \searrow liability, implying \nearrow fatalities
2. Uninsured indiv.
 - a. in fault: \searrow liability, implying \nearrow fatalities
 - b. victims: \nearrow liability, implying \searrow fatalities

Overall increase of 10% of fatalities with the no-fault system

H3: The more uninsured remaining, the less fatalities **Confirmed**

Public policy

- ❖ Does it make sense to force individuals get insured if this increases the number of fatalities on the road?
- ❖ Analyze the policy in the **sole light of fatalities?** (although major)
 - ❖ e.g. reduced costs and delays in court thanks to the no-fault
 - ❖ life indebted individuals may be in an awful state... = requires an overall welfare analysis
- ❖ Tools to **limit moral hazard** with **bonuses** (reduced premium) and **excess** (*franchise*)
- ❖ New tech... **permanent monitoring** of “safe driving” and adjusted premium...
- ❖ **Autonomous cars?** ⇔ no-fault?

TABLE 4: Are the Laws Predictable?

Dependent variable:	(1) Compulsory insurance	(2) Compulsory insurance	(3) Compulsory insurance	(4) No fault insurance	(5) No fault insurance	(6) No fault insurance
Ratio uninsured, deviation from state mean, 1 st lag		-0.666 (0.449)	-0.460 (0.458)		0.334 (0.341)	0.382 (0.363)
Fatalities p. person, dev. from state mean, 1 st lag		-3.694 (2.293)	-2.862 (2.345)		0.213 (2.386)	1.124 (2.470)
Ratio uninsured, deviation from state mean, 1 st lag			-0.240 (0.424)			0.134 (0.396)
Fatalities p. person, dev. from state mean, 2 nd lag			-1.620 (2.265)			-1.257 (2.424)
Percent unemployed	-0.022** (0.008)	-0.014 (0.009)	-0.013 (0.009)	-0.006 (0.007)	-0.012 (0.009)	-0.012 (0.009)
Fraction of Blacks in Population	-0.491`` (0.221)	-0.637** (0.244)	-0.611`` (0.255)	-0.299 (0.214)	-0.512`` (0.249)	-0.544`` (0.262)
Fraction of Hispanics in Population	-0.142 (0.276)	-0.129 (0.301)	-0.052 (0.314)	-1.509** (0.360)	-1.692** (0.398)	-1.676** (0.415)
Population in millions	-0.001 (0.003)	-0.004 (0.004)	-0.005 (0.004)	0.02** (0.003)	0.02** (0.004)	0.02** (0.004)
Violent crimes per Thousand	24.029`` (11.443)	31.118`` (12.338)	29.751`` (12.869)	-34.029** (10.500)	-32.025** (11.523)	-30.452`` (12.042)
Property crimes per Thousand	1.945 (1.849)	0.326 (2.061)	0.017 (2.163)	9.742** (1.761)	9.013** (1.960)	8.324** (2.054)
Real per capita income	-0.002 (0.011)	0.007 (0.012)	0.013 (0.013)	0.083** (0.009)	0.089** (0.011)	0.093** (0.011)
% population between ages 5 and 17	4.661** (1.046)	5.216** (1.268)	5.863** (1.403)	-4.146** (0.955)	-4.018** (1.131)	-4.039** (1.251)
% population between ages 18 and 24	-3.852** (1.148)	-2.562+ (1.528)	-2.131 (1.743)	1.130 (1.070)	1.424 (1.465)	1.976 (1.710)
% population between ages 25 and 44	6.299** (1.107)	5.740** (1.185)	5.528** (1.229)	-6.854** (1.002)	-7.054** (1.087)	-7.150** (1.134)
% population between ages 45 and 64	7.243** (1.483)	7.370** (1.610)	7.295** (1.685)	-5.918** (1.346)	-6.266** (1.455)	-6.630** (1.528)
Predictive accuracy	0.68	0.71	0.71	0.77	0.78	0.78
Observations	1221	910	808	1221	910	808

Notes: Marginal coefficients are present. Standard errors are in parentheses. +, ``, ** =significant at 10,5, and 1 percent respectively.

TABLE 5: The Effect of Compulsory Insurance

Dependent variable:	(1) Ratio uninsured	(2) Ratio uninsured in 4-year window of passage of law	(3) log(ratio uninsured)	(4) Ratio uninsured	(5) Ratio uninsured	(6) Fatalities per 10000 persons	(7) Fatalities per 10000 persons in 4-year window of passage of law	(8) Fatalities per vehicle mile	(9) Fatalities per 10000 persons	(10) Fatalities per 10000 persons
Compulsory insurance	-0.024** (0.004)	-0.031** (0.006)	-0.20** (0.032)	-0.025** (0.004)	-0.026** (0.004)	-0.0134 (0.0475)	0.0242 (0.0644)	1.51e-04 (5.95e-04)	8.65e-06+ (5.05e-06)	0.0152 (0.0486)
Require proof of insurance if accident				0.002 (0.003)					-0.118** (0.0401)	
Verify insurance at vehicle registration				-0.017** (0.004)					-0.149** (0.0460)	
Car registration per person	0.057 (0.040)	0.12+ (0.069)	0.73** (0.30)	0.049 (0.039)	0.037 (0.046)	2.18** (0.355)	0.363 (0.789)	0.016** (0.004)	2.60** (0.470)	2.18** (0.365)
Proportion of trucks	-0.004 (0.077)	0.22 (0.14)	1.17` (0.59)	-0.005 (0.076)	-0.010 (0.079)	2.26** (0.576)	-0.0196 (1.48)	0.011 (0.007)	1.06 (0.920)	2.05** (0.769)
Fraction of blacks in population	-0.34 (0.24)	0.56 (0.43)	-5.79** (1.82)	-0.39+ (0.23)	-0.33 (0.25)	5.14** (1.51)	4.20 (4.91)	0.038` (0.019)	3.35 (2.85)	4.78** (1.77)
Violent crime per thousand	1.71 (2.06)	-9.30` (4.21)	-14.9 (15.7)	2.63 (2.05)	2.08 (2.18)	-28.6 (19.7)	-23.1 (45.7)	-0.031 (0.25)	-22.9 (22.9)	-22.5 (22.5)
Property crimes per thousand	-0.20 (0.36)	0.040 (0.74)	2.78 (2.75)	-0.35 (0.36)	-0.20 (0.40)	13.7** (3.50)	16.5` (8.37)	9.94e-04 (0.044)	19.9** (4.29)	15.3** (4.10e)
Percent unemployed	5.52e-04 (0.001)	-8.73e-04 (0.002)	-0.012 (0.009)	0.001 (0.001)	1.08e-04 (0.001)	-0.0324** (0.0116)	-0.0437` (0.0214)	-5.14e-04** (1.46e-04)	-0.0668** (0.0134)	-0.0384** (0.0117)
Real personal income in 1984 dollars	-1.33e-10 (9.27e-11)	-7.37e-10 (6.02e-10)	-1.11e-09 (7.06e-10)	-1.43e-10 (9.10e-11)	-1.04e-10 (1.02e-10)	3.93e-09** (8.23e-10)	9.00e-09+ (4.64e-09)	3.75e-11** (1.03e-11)	4.37e-09** (1.05e-09)	4.92e-09** (9.03e-10)
% population between 18 and 24	0.30 (0.26)	2.15** (0.66)	-3.82+ (1.98)	7.19e-04 (0.26)	0.20 (0.27)	19.1** (2.86)	29.5** (7.93)	0.14** (0.036)	19.2** (3.08)	17.4** (2.86)
Vehicle miles travel per person					0.99 (2.50)					71.3** (26.8)
Seatbelt laws					-0.009 (0.012)					-0.151 (0.134)
Alcohol consumption per capita					9.61e-05 (1.13e-04)					1.24e-03 (1.50e-03)
New car registration per person					-0.17 (0.15)					-1.11 (0.723)
Observations	489	183	489	489	489	803	315	803	565	803
R-squared	0.35	0.28	0.36	0.38	0.35	0.88	0.88	0.88	0.86	0.76

Notes: All specifications include state and year fixed effects. Standard errors in parentheses. +, *, and ** denote statistical significance at the 10, 5, and 1 percent levels.

TABLE 6: The Effect of No-Fault Regulation

Dependent variable:	(1) Ratio uninsured	(2) Ratio uninsured in 4-year window of passage of law	(3) log (ratio uninsured)	(4) Ratio uninsured	(5) Ratio uninsured	(6) Fatalities per 10000 persons	(7) Fatalities per 10000 persons in 4-year window of passage of law	(8) Fatalities per vehicle mile	(9) Fatalities per person	(10) Fatalities per 10000 persons
No-fault	0.031** (0.010)	0.040** (0.015)	0.26** (0.079)		0.040** (0.011)	0.258** (0.0714)	0.0759 (0.0863)	0.002* (9.61e-04)		0.307** (0.0765)
level				0.007** (0.003)					0.104** (0.0217)	
Car registration per person	-0.025 (0.040)	-0.12* (0.060)	0.073 (0.33)	0.006 (0.040)		1.28** (0.319)	-0.384 (0.386)	0.015** (0.004)	1.48** (0.316)	1.22** (0.360)
Proportion of trucks	-0.053 (0.057)	-0.17 ⁺ (0.087)	-0.49 (0.47)	-0.027 (0.058)		0.989 ⁺ (0.515)	0.509 (0.645)	0.011 ⁺ (0.007)	1.27** (0.515)	0.937 ⁺ (0.521)
Fraction of blacks in population	-0.16 (0.29)	-0.030 (0.53)	2.25 (2.33)	-0.34 (0.29)		2.11 (1.68)	-3.84* (1.92)	-0.046* (0.023)	0.781 (1.71)	1.43 (1.72)
Violent crime per thousand	-3.04 (2.20)	-3.78 (3.54)	-22.8 (17.9)	-3.24 (2.21)		46.4** (18.1)	63.1** (23.2)	0.58** (0.24)	41.1* (18.0)	42.5** (18.3)
Property crimes per thousand	-0.88** (0.32)	-3.07** (0.58)	-3.79 (2.59)	-0.80** (0.32)		7.14** (2.53)	2.73 (3.86)	0.017 (0.034)	8.23** (2.51)	5.31* (2.67)
Percent unemployed	-4.48e-04 (0.001)	0.002 (0.002)	-8.76e-04 (0.009)	-7.30e-04 (0.001)		-0.0585** (9.89e-03)	-0.0328** (0.0113)	-4.81e-04** (1.33e-04)	-0.0621** (9.86e-03)	-0.0560** (0.0104)
Real personal income in 1984 dollars	-1.57e-10 ⁺ (9.17e-11)	-2.78e-10 (2.89e-10)	-8.29e-10 (7.43e-10)	-1.71e-10 ⁺ (9.18e-11)		2.70e-9** (7.15e-10)	5.90e-09** (1.66e-09)	1.79e-11 ⁺ (9.63e-12)	2.61e-09** (7.10e-10)	2.79e-09** (7.64e-10)
% population between ages 18 and 24	-0.38 ⁺ (0.23)	-0.35 (0.35)	-2.18 (1.84)	-0.39 ⁺ (0.23)		5.92** (1.87)	.558** (2.32)	0.037 (0.025)	5.77** (1.86)	5.69** (1.88)
Vehicle miles travel per person					0.68 ⁺ (0.41)					6.97 ⁺ (4.18)
Seatbelt laws					-0.051** (0.012)					-0.129 (0.0994)
Average speed					5.46e-04 (4.50e-04)					6.31e-03 (4.07e-03)
Alcohol consumption per capita					1.09e-04** (3.57e-05)					6.84e-04* (2.96e-04)
New car registration per person					0.57** (0.13)					-0.224 (1.17)
Observations	528	225	528	528	528	671	291	671	671	671
R-squared	0.35	0.51	0.46	0.35	0.41	0.88	0.85	0.88	0.88	0.81

Notes: All specifications include state and year fixed effects. ⁺, *, and ** denote statistical significance at the 10, 5, and 1 percent levels.

Close question - abstract

The Effects of Mandatory **Seat Belt Laws** on Driving Behavior and Traffic Fatalities

Cohen & Einav (2001)

This paper investigates the **effects of mandatory seat belt laws on driver behavior and traffic fatalities**. [...]

Controlling for the endogeneity of seat belt usage, we find that it **decreases overall traffic fatalities**. [...]

Testing the compensating behavior theory, which suggests that seat belt use also has an adverse effect on fatalities by **encouraging careless driving**, we find that **this theory is not supported by the data**. [...]

Close question - abstract

How Dangerous Are Drinking Drivers?

Letvit & Porter (2001)

[...] The key to our identification strategy is a hidden richness inherent in twocar crashes. Drivers with alcohol in their blood are **seven times more likely to cause a fatal crash**; legally drunk drivers pose a risk **13 times greater** than sober drivers.

The **externality per mile driven by a drunk driver is at least 30 cents**. At current enforcement rates the punishment per arrest for drunk driving that **internalizes this externality** would be equivalent to a **fine of \$8,000**.

3. Research articles: insurance

Paper 1: Cohen & Dehejia (2004) about car insurance and risk

Paper 2: Sommers et al. (2013) about Obamacare and access to care
(if we have time)

Insurance and access to care

Sommers, Buchmueller, Decker,
Carey & Kronick (2013)

"The Affordable Care Act Has Led To Significant Gains In Health Insurance And Access To Care For Young Adults"

Health Affairs

US context

- ❖ Insurance market:
 - ❖ Mostly **private** (individual or collective coverage)
 - ❖ Partly **public** (since 1965: **Medicare** for 65yo+; **Medicaid** for low income & children)
 - ❖ Affordable Care Act (aka **Obamacare**) in 2010
- ❖ **52% of the health spending** remain **private** in the US twice the OECD average (private insurance or out-of-pocket)
- ❖ In 2010, **50 millions Americans without health coverage**
Among which 10 millions are between 19 to 25 years old (in the transition towards labor market)
- ❖ Massive **negative externalities**

Obamacare – 3 pillars

1. Regulate the individual coverage market

Limit **selection** and **discriminatory** practices from insurance companies
(e.g. cannot refuse to provide insurance due to medical history)

2. Disincentivize non-coverage

Financial **penalty** for those who do not get covered, in order to avoid **anti-selection**
Low risk individuals are also included in the market, in order to **decrease the premia**
Revoked in 2019 by Trump's administration

3. Subsidize coverage and extension of Medicaid

Allow more Americans to benefit from health coverage

The study

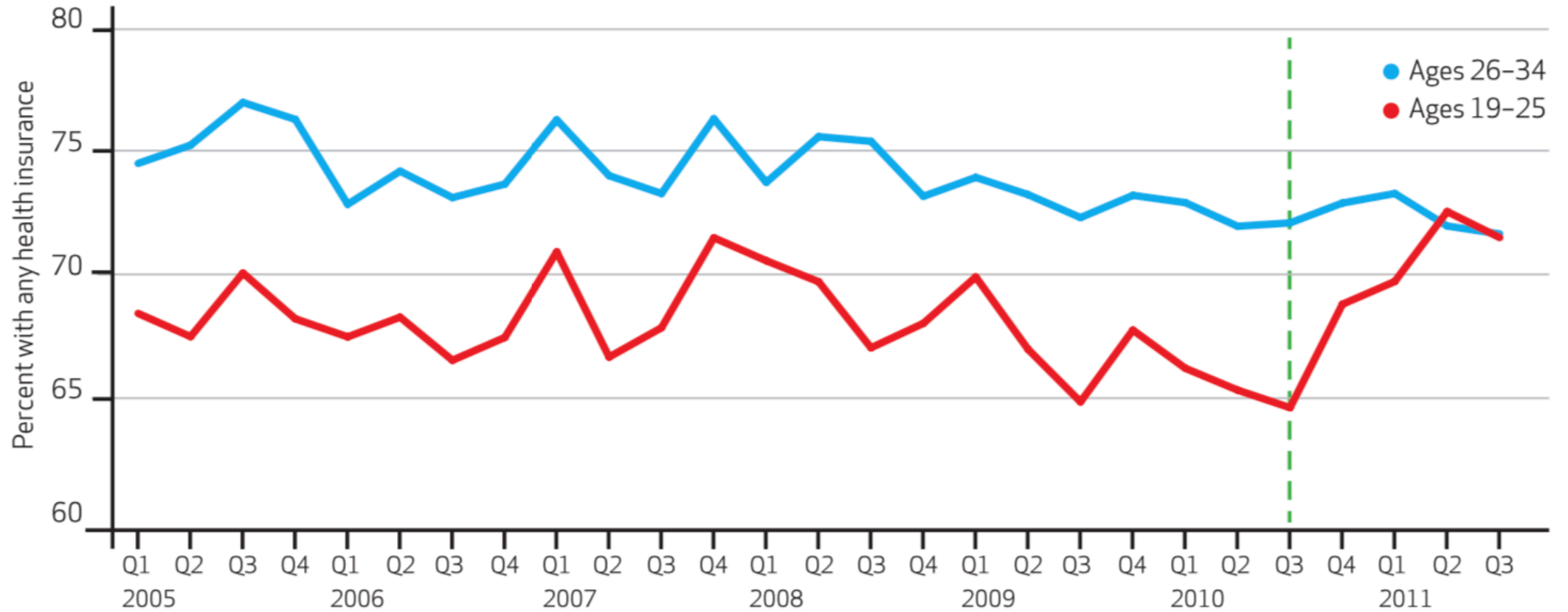
- ❖ Effect of the first measure of the Affordable Care Act (ACA), which **extends the benefit from the parental insurance to youngster between 19 and 25 years old**

2 questions:

1. Are there **many newly covered** and **who** are they?
 2. Does it change **access to care**?
- ❖ Use the **discontinuity** in the extension (below 26 years old)
Compare **19-25** to **26-34** years old (diff-in-diff)
Heterogeneity in ethnicity, gender, educ., matrimonial status, employment
Data from 2 surveys: Centers for Disease Control and Prevention & US Census Bureau

Results (i)

Health Insurance Coverage Among Young Adults, Ages 19-25 And 26-34, By Quarter, 2005-11



Results (ii) – heterogeneity by subgroup

Who benefited from the increased coverage?

Effect Of The Affordable Care Act (ACA) Dependent Coverage Provision On Insurance Status For Adults Ages 19–25 And 26–34, By Subgroups With Various Characteristics

Group	Percent of sample	Adults ages 19–25 with insurance, before ACA (%)	Percentage-point change, before versus after ACA		Difference in percentage-point change between age groups	p value for between-group difference — ^a
			Adults ages 19–25	Adults ages 26–34		
Full sample	100.0	68.1	7.2****	0.5	6.7****	— ^a
SEX						
Male	49.9	63.3	9.7****	1.4	8.2****	Ref
Female	50.2	72.9	4.4***	-0.5	4.9****	0.08*
MARITAL STATUS						
Married	37.3	67.9	4.0*	-1.2	5.2**	Ref
Unmarried	62.7	68.2	8.1****	1.7	6.4****	0.51
RACE OR ETHNICITY						
White, non-Hispanic	61.3	74.9	6.1****	-1.3	7.4****	Ref
Black, non-Hispanic	13.4	65.0	11.3****	4.9*	6.4**	0.75
Hispanic	19.0	46.2	6.2***	0.7	5.5***	0.75
Other	6.4	70.8	10.8**	6.5*	4.3	0.98
EMPLOYMENT STATUS						
Working	73.4	68.6	6.3****	-0.5	6.8****	Ref
Not working	26.6	67.1	9.1****	3.0	6.0***	0.87
HEALTH STATUS						
Excellent	40.5	73.4	7.6****	-0.2	7.8****	Ref
Very good	33.3	68.3	8.2****	1.6	6.6****	0.56
Good	21.4	58.7	4.8**	0.8	4.0*	0.41
Fair or poor	4.8	57.3	6.3	0.3	5.9	0.54

Rather men

Rather unmarried

Rather healthier

(but not statistically different)

Results (iii) – increased access to care

Effect Of The Affordable Care Act (ACA) Dependent Coverage Provision On Access To Care For Adults Ages 19–25 And 26–34

Average effect	Percentage-point change, before versus after ACA		Difference in percentage-point change
	Adults ages 19–25	Adults ages 26–34	
DELAYED GETTING CARE IN THE PAST YEAR BECAUSE OF COST			
2010 Q4–2011 Q1	-1.7	-0.5	-1.2
2011 Q2–Q3	-5.6***	-1.6	-4.0***
DID NOT GET CARE IN THE PAST YEAR BECAUSE OF COST			
2010 Q4–2011 Q1	-0.7	-0.4	-0.3
2011 Q2–Q3	-3.7***	-1.4	-2.3**
HAS A USUAL SOURCE OF CARE (NOT EMERGENCY DEPARTMENT)			
2010 Q4–2011 Q1	-1.5	-1.7	0.3
2011 Q2–Q3	3.9	1.4	2.6

Limits

- ❖ Obviously **doubtful comparability of 19-25 vs 26-34 yo**

Common trend for health coverage in 5 previous years...
but no info on access to care before the ACA

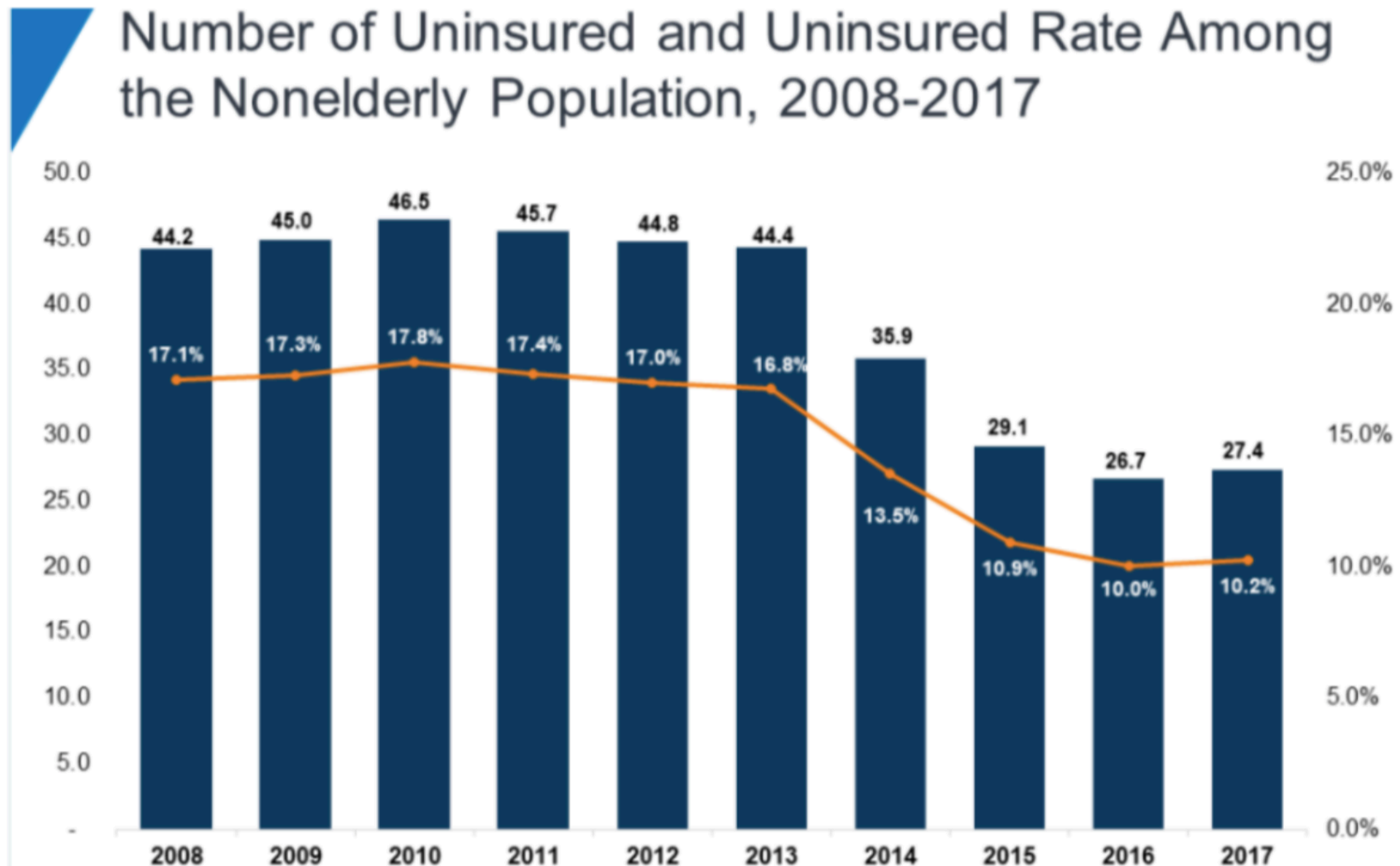
- ❖ Especially because **no control variables** included!

This could at least account for part of the heterogeneity (although limited by what is in the data)

- ❖ What the study **doesn't provide results about**

- ❖ Are the youth less suffering from “**job lock**” (insurance tied to hardly quitable job)
- ❖ Access to care is not binary (as the questions are) => no result on **intensity**
- ❖ Access to care is not a measure of health status => no result on **health** as such

Extension generalized in the population



NOTE: Includes nonelderly individuals ages 0 to 64.

SOURCE: Kaiser Family Foundation analysis of 2008-2017 American Community Survey (ACS), 1-Year Estimates.

Public Economics

Level 2

2020-2021

Conférence de méthode

Session 3

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