# University of Zurich

Faculty of Law
Fall Semester 2012

## Law & Economics
## Economic Analysis of Law

Criminal Law and Law Enforcement

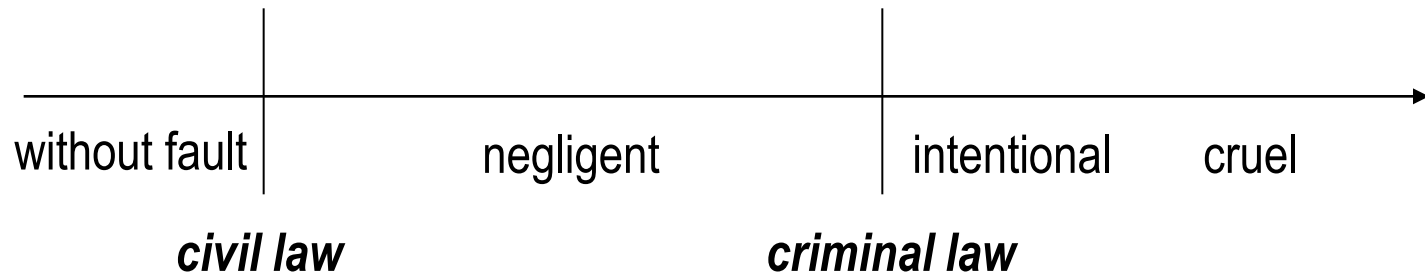Prof. Dr. Andreas Heinemann/Dr. Mark Steiner

Slides by Prof. Dr. Rolf H. Weber / Dr. Mark Steiner

# Content – Aims

- **The traditional view of criminal law**
  - What actions are criminal?
  - „Moral" explanation for criminal law
- **Economic theory of criminal law**
  - Need for criminal law
  - Rationality and criminal law
  - Optimal deterrence and punishment
  - Incentives on the market for crime
  - Optimal punishment
- **Becker's Model**
- **Discussion and questions**

# Traditional View of Criminal Law (1)

- **Criminal intent – mens rea**

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|                |                |                              |
without fault    |    negligent    |    intentional    cruel
                civil law                criminal law
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- **Risk to the public – governmental prosecution**
  - Murder as a risk to peace and security
  - No „victimless" crimes
    - Gambling, prostitution, drugs?
  - Punishment also without damage to an individual

# Book Recommendation

# Traditional View of Criminal Law (2)

- **Burden of proof**
  - Higher burden of proof than in civil proceedings
    - Civil law: 8 CC: A person must derive certain legal rights from facts
    - Criminal law: No decision on unsafe grounds => Prevent incorrect decisions
- **Punishment**
  - Deterrence as objective of the legal norm
  - Often separation of compensation and punishment
  - Non-monetary sanctions
    - Prison
    - Obligation to work/render services
    - Physical penalties; death penalty

# What is Criminal?

a) **Seriously offending acts**

   ■ Murder, rape, betrayal, etc.

b) **Disguising of an act intending to cause serious injury**

   ■ Hit and run, violation of safety instructions

c) **Certain other acts**

   ■ Speeding? Sale of alcohol to under-age consumers ?

   ■ „Socially unwanted" activities => depending on society

# Moral Theory of Criminal Law – Problems

- **Categorisation of various acts**
  - A starving person steals bread?
  - Unintentional sale of alcohol to under-age consumers?
  - Residual risk of a product which is fatal?
- **Unsettled aspects**
  - Shoot and miss => Punishment
  - Dangerous cables on a construction site => No punishment
  - USA: Fenceless swimming pools more dangerous than weapons?
  - Comparisons in criminal law?
- **Historical / religious influences**

# Economic Theory of Criminal Law
# Need for Criminal Law?

- **Economic theory of property and tort law**
  - External costs of accidents and tort
  - Internalisation through law
  - Perfect compensation of damages
    - Indifference?
    - Risk preferences?
- **Problems**
  - Perfect compensation is often not possible
  - If perfect compensation possible
    - Probability of discovery < 1
    - Preventive legal costs => no lawsuit
    - Protection of individual freedom of action

# Economic Theory of Criminal Law Problems of Tort and Property Law (1)

- **Perfect compensation not possible**
  - No reliable price without market
    - No market for legs, arms etc.
    - No market for psychological damages like fear
  - Subjective differences in valuation
- **Perfect compensation possible**
  - Probability of being caught
  - E.g. Sneakers for CHF 200 buy or steal?
    - 0.5 x 200 = 100
    - Expected costs of theft = 100
  - Wilful offenses are often rational!

# Economic Theory of Criminal Law Problems of Tort and Property Law (2)

- **Compensation of damages not enough (sneaker example)**
  - Even is probability of getting caught is 1: 1 x 200 = 200
  - Indifference between theft and bargain
  - 200 + X = Incentive to bargain
- **Value of freedom of action**
  - Costs of cooperation
  - Protection of the subjective value
- **Preventive costs of tort law**
  - Lawyers' fees and costs of proceedings
  - Unclear „Legal Standard" (What does negligent mean?)
  - Non-efficient „Legal Standard" => No optimal incentives

# Homo Oeconomicus and Punishment
# The „Rational Criminal"

- **Crime as rational act**
  - Serious crime brings higher benefit
  - $y = y(x)$
  - Punishment for a crime
  - $f = f(x)$
  - Probability of punishment
  - $p = p(x)$
- **„Rational criminal"**
  - Max $y(x) - p(x) * f(x)$

# Reduced Rationality and Punishment

- **„Saturday Night Fever"**
  - Discounting of forthcoming events
    - Unusual weight of present situation
    - Imprudence => wrong discount rates
  - „Mood" as factor of influence
    - Incentives for „moods"
- **Intrinsic motivation – Moral courage**
  - Broadening the concept of rationality
  - Willingness to pay for „guilty consciences"
    - $b = b(x)$ rises with the gravity of an offence x
  - Extended costs = $f(x) + b(x)$

# (Economic) aim of Criminal Law
# Optimal Deterrence

- **Minimise the social costs of an offence**
  - Enforcement costs v. costs of crime
  - Problem: Acceptance of benefits to the criminal ?
    - Benefit of a starving thief
    - „Benefit" of a rapist

| Expected punishment of a crime | | |
|---|---|---|
| f (punishment) | p (probability) | p x f (expected punishment) |
| 10 | 1.00 | 10 |
| 20 | 0.50 | 10 |
| 40 | 0.25 | 10 |
| 100 | 0.10 | 10 |

# Normative Law & Economics
# Optimal Deterrence – Criminal Law

- **Rules**
  - The lesser p the bigger f
  - The higher the private benefit the higher the punishment
  - No or minor punishment, if an act is unavoidable
  - The more difficult an offender is to catch, the higher the punishment
- **Optimum: Flexible punishment**
  - **p(x) x y(x) + 1$**
  - No "over-deterrence"

# Reasons for Non-monetary Punishment

- **Economic explanation:**
  - Monetary sanctions are often ineffective
    - Personal wealth
    - Subjective benefit
    - Errors
      - Probability to get off (p)
      - Expected punishment (f)
- **Further explanations**
  - Increased deterrence
  - Impossible repetition(s)
  - Vengeance

# Punishment

- **Monetary sanctions**
  - Special case: uninsurable
- **Prison or other deprivation of liberty**
  - Exclusive for criminal behaviour
  - Working sanctions – costs of deprivation of liberty
- **Other non-monetary sanctions**
  - Physical pain, amputation, death penalty
  - Public announcement of the offender
- **Damage to the reputation**
  - „Criminal", criminal record

# Positive Law & Economics
# Incentives on the Market for Crimes

- **Economic situation**
  - Opportunity costs of a crime
- **USA: Abortions and crime**
  - Levitt: „Problem childs"
- **Regulation and crime => „Regulation return"**
  - Evasion of regulation enables benefits
  - Market for crime
    - Drug-related crime
    - Prostitution
  - Example: Prohibition USA 1920ies:
    - Murder and crime rate rises in the beginning…
    - … and falls with (re-)legalisation

# Positive Law & Economics
# Does Crime Pay?

| Criminal and honest earnings per year (1988 US-$) | | | | |
|---|---|---|---|---|
| | High effort | | Normal effort | |
| | Crime | Work | Crime | Work |
| Theft | 5'711 | 5'540 | 2'368 | 7'931 |
| Robbery | 6'541 | 3'766 | 2'814 | 5'816 |
| Fraud | 14'801 | 6'245 | 6'816 | 8'113 |
| Car theft | 26'043 | 2'308 | 15'008 | 5'457 |
| Mixed | 6'915 | 5'086 | 5'626 | 6'956 |

- **Does Crime Pay?, Wilson/Abrahamse 1992, 9 Justice Quarterly 359**
  - Income of criminals
  - Data from released criminals from three states

# Normative Law & Economics
# Efficient Punishment

- **Benefit of punishment**
  - Deterrence
  - Vengeance
    - Social benefit?
  - Rehabilitation
    - Extremely high recidivism rate („Three and out"-statutes)
    - Private vs. public prisons (USA)
  - „Incapacitation"
    - „Replacement effect" => Useful for inelastic supply
- **Costs of Punishment**
  - „Factories with fences"?

# Becker's Model (1)

- **Cost of crime**
  - Crime as „industry" or sector
  - Typical costs: damages
    - Theft, fraud, etc.
    - Murder, manslaughter, injuries
  - Costs for enforcement
    - Police, prisons
    - Prevention costs (alarm systems etc.)
    - Caution costs

# Becker's Model (2)

- **Behavior and dependencies**
  1. Number of crimes and their cost
  2. Number of crimes and punishment
  3. Number of crimes and expenditure on police and courts
  4. Number of convictions and expenditures on prisons and other punishment
  5. Number of crimes and private expenditures on protection and prevention

# Becker's Model (3)

- **Functional action-model**
  - Criminal as a „homo oeconomicus"
  - Behaviour depends on costs and benefits:
    - Benefit of a crime
    - Chance to be convicted x amount of penalty
  - Risk preferences of individuals
    - Usual: risk-averse
    - Risk-friendly => Independent behaviour despite of police and punishment

# Becker's Model (4)

- **Optimal conditions**
  - Optimal deterrence
    - Probability of conviction (p) => 1
  - Optimal punishment
    - Punishment (f) in the amount of social costs
  - But: Costs of enforcement
- **Aim: Minimize the social costs!**

# Becker's Model (5)

- **Discussion**
  - What sanctions are preferable?
  - How are the sanctions implemented?
  - Error: systematically, accidentally?
  - Empiricism?
  - Problems of the model?
  - Extension of the model?