

**ASURE**  
AUTONOMOUS INSURANCE

**@ETHBerlin hackathon**

**DEZENTRALIZED PENSION SYSTEM**

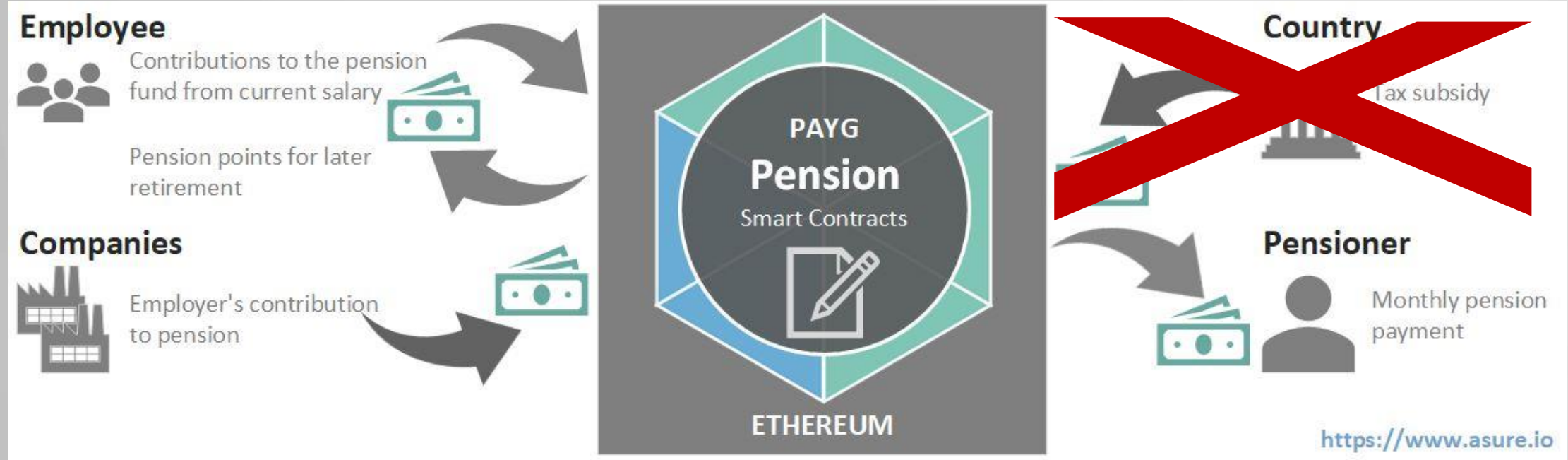
[www.asure.io](http://www.asure.io)

# **WHY? AND WHY DECENTRALIZED PENSION SYSTEM?**

- 1. We want to improve people lives**
- 2. Many industrial countries are in trouble**
- 3. Globalization**

**decentralization and crypto is awesome!!!**

# PAYG / Redistribution Scheme



## Pros

- Inflation save
- Connected to current salaries
- Government protects you against risks

## Idea

- Tokenization of pension points => DECENTRALIZED PENSION TOKEN (DPT)

## Cons

- Must be mandatory

# INCENTIVATION MODEL

Join early and profit

$$f(x) = 1.5 - \log(0.12 * x)$$

Pay longer - receive longer (40 years)

$$ReciveTimeInMonths = \frac{(\sum PaymentMonth)^2}{12*40years}$$

Pay more ETH - receive more DPT

$$DPTs = 1 + \frac{amount - amount_{max}}{TargetPrice - amount_{max}} * DPTFactor$$

# **Pension smartcontract**

**deposit(uint256 amount) public payable returns (bool)**

**claim(uint16 year, uint8 month) public returns (bool)**

**retire(uint256 amount) public returns (bool)**

**withdraw(uint16 year, uint8 month) public returns (bool)**

# Lessons learned

- People must only participate once
- People who leave the system last are at a disadvantage
- ...

# THANK YOU



# ETHBERLIN

HACKATHON / WORKSHOPS / TALKS

Demo: <https://ethberlin.asure.io>

GitHub: <https://github.com/AsureFoundation/ETHBerlin>