De la théorie de la décision à l'économie comportementale : comment agir en prévention ?

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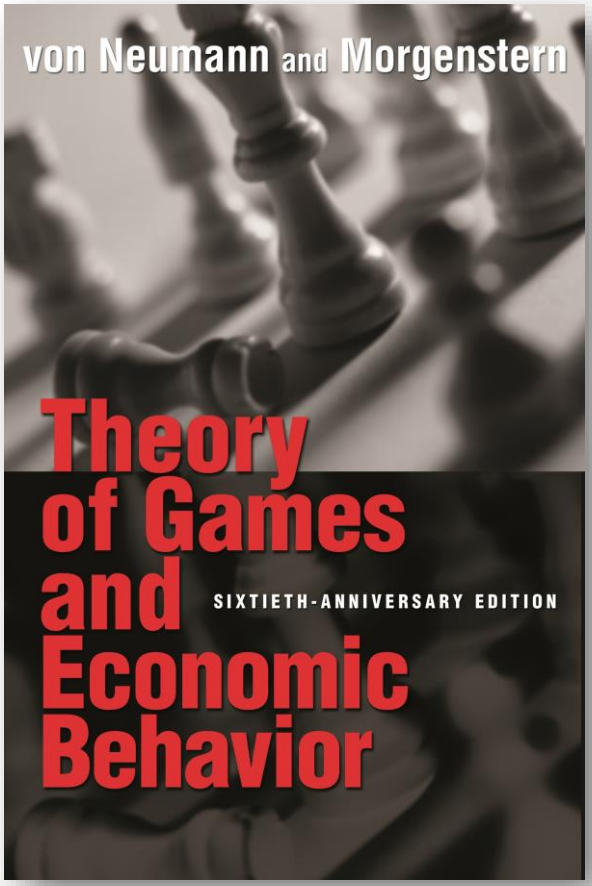
Afin de rendre la présentation interactive, nous vous invitons à aller sur

www.menti.com

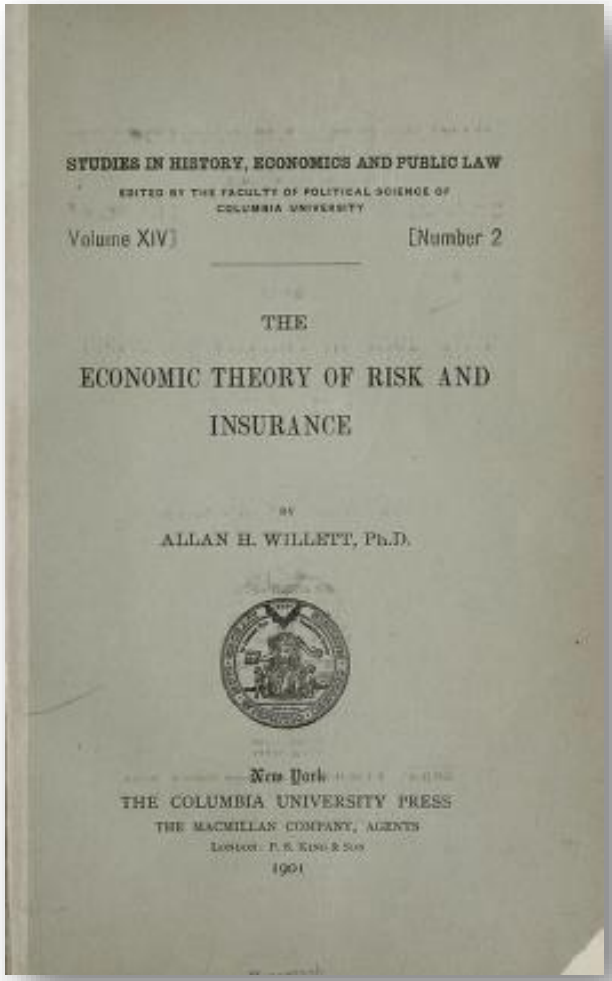
Et de tapez le code **4923 8973**

Nous vous laissons 5 minutes pour répondre aux différentes questions

La prévention des risques dans les théories économiques de l'assurance



Avant la théorie de la décision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ECONOMIC THEORY OF RISK AND INSURANCE

BY

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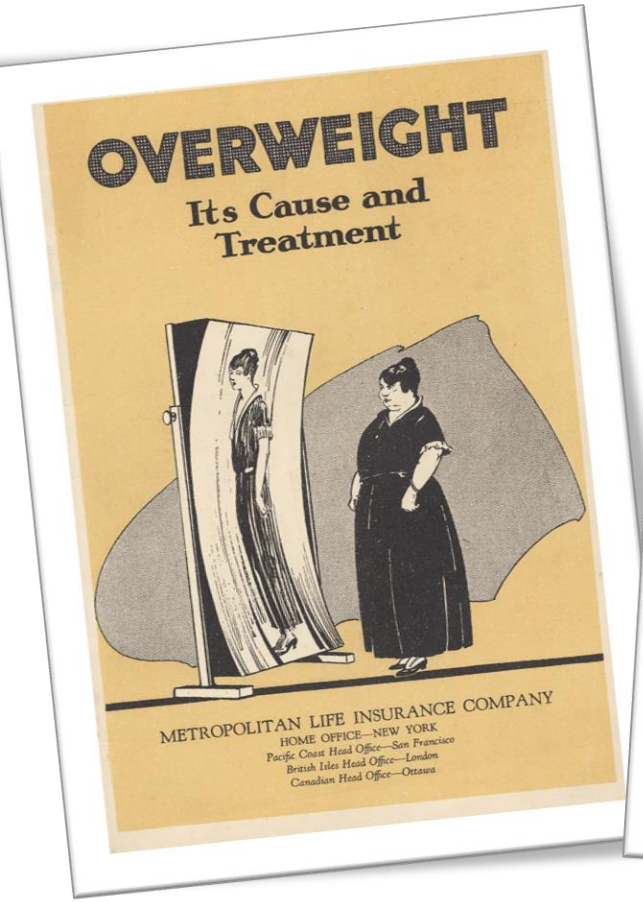
1901

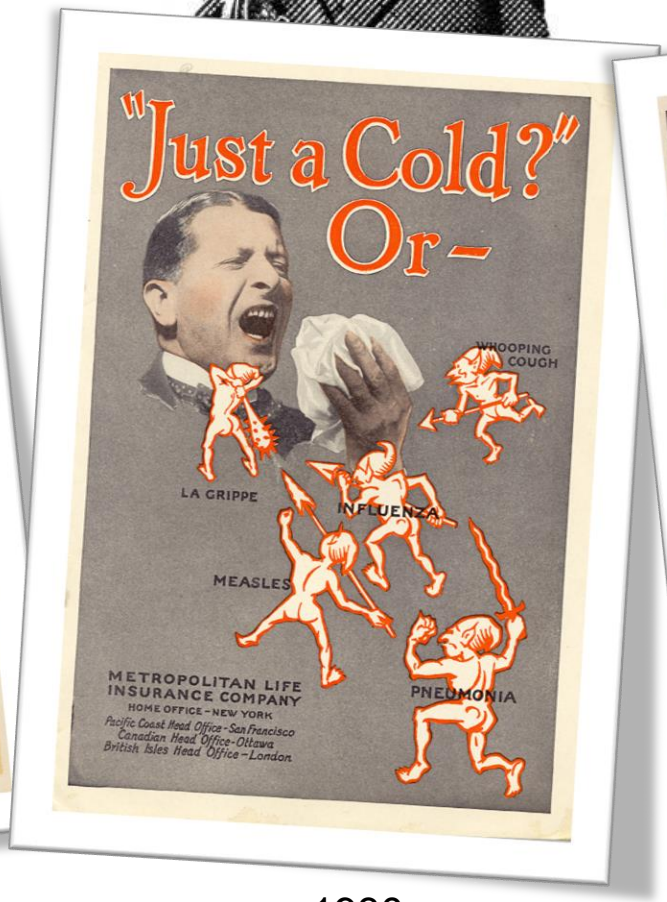
- Pas de modélisation de l'incertain
- Ordonnancement des préférences
- L'assurance est un pari

Légiférer et inciter

1920s

Informer et éduquer



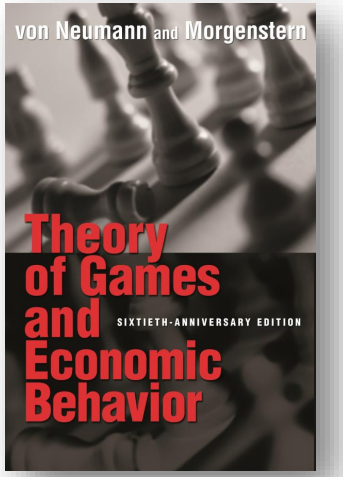


1930s

Discipliner

Students at the Brooklyn School of Automotive Trades learning to drive using the Aetna (Life & Casualty Insurance) Drivotrainer simulator. Driver education programs like the Drivotrainer system attracted goodwill for the auto insurance industry, helped reduce claims, and produced proprietary data used by companies to set rates. (Driving Stationary Aetnacars, **1953**, Brooklyn Daily Eagle photographs, Brooklyn Collection, Brooklyn Public Library.)

Horan, Caley. Insurance Era (p. 63)



La théorie de la décision…

Let $u_i (i = 1, \cdots, I)$ be the number described in A(σ)

Define u over all possible choices by

$$u(c) = \sum_{i=1}^{I} p_i u_i$$

Where

$$c = [(p_i, A_i), i = 1, \cdots, I]$$

$$u(c_1) \geq u(c_2) \quad iff \quad c_1 \succsim c_2$$

$$where, u(c_1) = \sum_{i=1}^{I} p_{i,1} u_{i,1}$$

$$u(c_2) = \sum_{i=1}^{I} p_{i,2} u_{i,2}$$

- Modélisation de l'incertain
- Maximisation de l'espérance d'utilité
- L'assurance est un langage commun

… *pour gérer l'alea moral et agir en prévention?*

Source: Federal Emergency Management Agency (FEMA). | GAO-20-396

Biggert-Waters Act, 2012

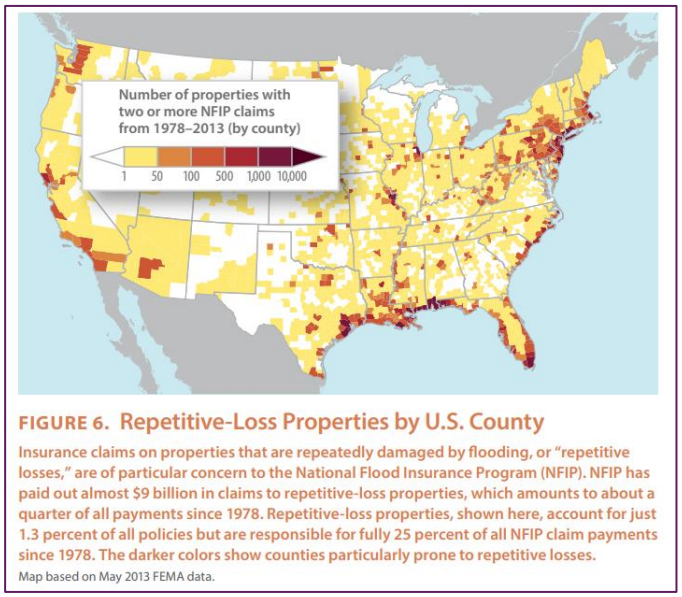
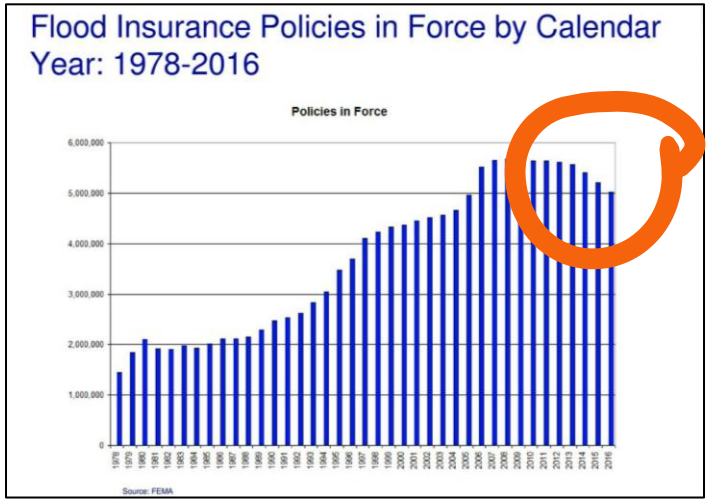


FIGURE 6. Repetitive-Loss Properties by U.S. County

Insurance claims on properties that are repeatedly damaged by flooding, or "repetitive losses," are of particular concern to the National Flood Insurance Program (NFIP). NFIP has paid out almost $9 billion in claims to repetitive-loss properties, which amounts to about a quarter of all payments since 1978. Repetitive-loss properties, shown here, account for just 1.3 percent of all policies but are responsible for fully 25 percent of all NFIP claim payments since 1978. The darker colors show counties particularly prone to repetitive losses.

Map based on May 2013 FEMA data.

https://www.ucsusa.org/sites/default/files/2019-09/Overwhelming-Risk-Full-Report.pdf



Klein, 2017, https://slideplayer.com/slide/12920396/

Théorie des perspectives et économie comportementale

Let $u_i (i = 1, \cdots, I)$ be the number described in A(σ)

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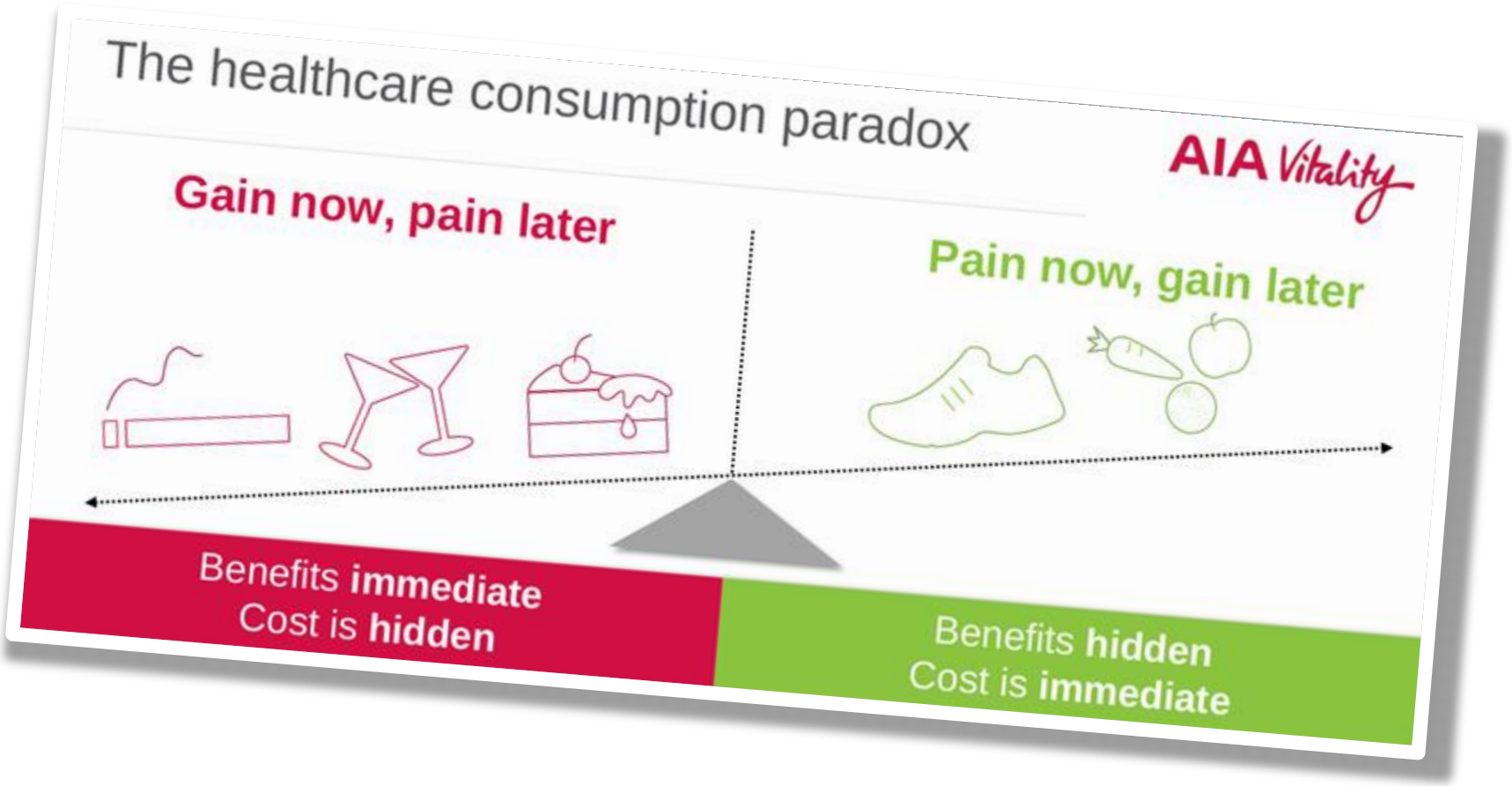
$$u(c_2) = \sum_{i=1}^{I} p_{i,2} u_{i,2}$$

"In prospect theory, the value of each outcome is multiplied by a decision **weight**. Decision weights are inferred from choices between prospects much as subjective probabilities are inferred from preferences in the Ramsey-Savage approach. However, **decision weights are not probabilities: they do not obey the probability axioms and they should not be interpreted as measures of degree or belief**"

Kahneman & Tversky, 1979

Résultats de la mise en situation (1ère partie)

Comprendre pour motiver



Résultats de la mise en situation (2ème partie)

Engager

Conclusion

- ✓ On ne peut pas faire de prévention sans les individus
- ✓ Motivation et besoins personnels à prendre en compte
- ✓ Engager à modifier ses comportements tout en maintenant la liberté de chacun : Manipulation vertueuse ?