

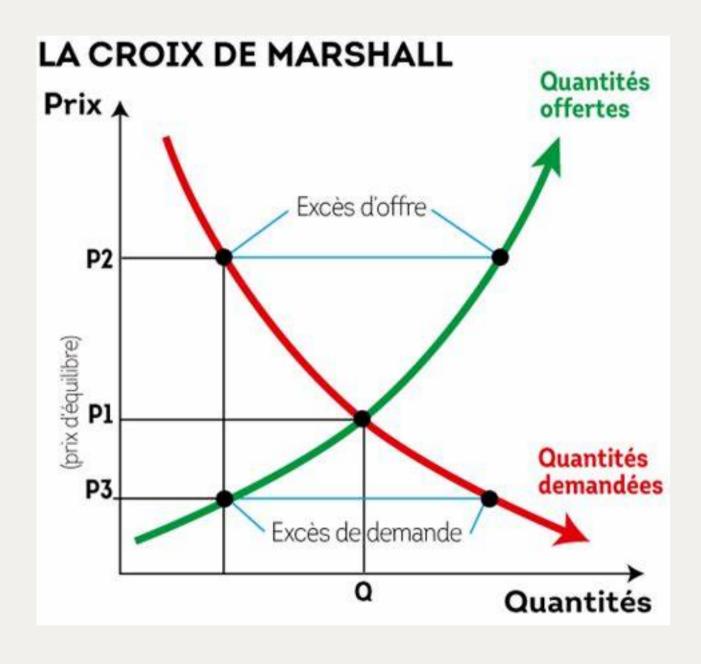
# The Marshallian Cross. The Price Theory of Demand and Supply' to become 'How would Pigou React to the Current Global Warming Crisis?'

Arthur Cecil Pigou was a British economist born in 1877. He is best known for his work in welfare economics and for introducing the notion of externality. He also gave his name to the "Pigou tax". One of his mentors was Alfred Marshal.



### The Marshallian Cross:

Economic concept that illustrates how the market price of a good is determined by the intersection of supply and demand curves.



### 1. The Welfare Economy

- Pigou establishes a new branch of economic analysis with the welfare economics.
- Economic well-being is defined as the measure of individual economic desires being satisfied.
- The study is limited to well-being measurable by a monetary measure, excluding other factors of general well-being.
- Social welfare is the sum of individual well-being.
- Pigou posits a decreasing marginal utility of income, decreasing as income increases.

- Transferring income from the rich to the poor increases social welfare, as the loss of utility for the rich is compensated by the gain for the poor.
- Improving social welfare can result from increasing GDP without widening inequalities or from restructuring the economy to favor the incomes of the poor.
- Pigou believes that the market alone does not always ensure the optimal social welfare.





## 2. The Concept of Externalities

Pigou developed the theory of externalities to understand the effects of individual activities on others.

- Positive externalities:
Some actions may benefit
others, such as growing
flowers to help
neighboring beekeepers

- Negative externalities:
The actions of one individual can harm others.
For example, a factory discharging waste into the sea disrupts the activities of fishermen.

To solve the problems caused by externalities, Pigou proposes integrating their cost into activities.

- The private cost, based solely on the individual's direct expenditure, differs from the social cost, which includes the effects on society. For example, a polluting factory does not take into account the social cost of pollution, which leads to overproduction.
- Pigou suggests imposing a tax equivalent to the cost of the externality to align the private cost with the social cost.
- Such taxes are known as Pigou taxes or Pigouvian taxes, and are designed to reduce the negative effects of externalities.
- Examples of Pigou taxes include tobacco and alcohol taxes, the carbon tax, and the polluter-pays principle.

Source : Ministère de l'Economie, des Finances et de la Souveraineté Industrielle et Numérique : Arthur Pigou | economie.gouv.fr



## How would Pigou react to the current global warming crisis?

So Pigou would respond to the global warming crisis by applying the principles of his economic analysis, in particular his theory of externalities.

• He would recognize that global warming is largely caused by negative externalities resulting from economic activities, such as the emission of greenhouse gases.

01.

• Propose the use of economic instruments such as Pigou taxes to internalize these externalities.

02.

- Recommend the establishment of a carbon tax to impose a cost on emissions of carbon dioxide and other greenhouse gases.
- This tax would increase the social cost of fossil fuel use, providing an incentive to reduce emissions and adopt environmentally-friendly alternatives.

03.

• Pigou could support policies to redistribute the revenue from these taxes to mitigate the effects on the most vulnerable populations.

### Conclusion

Pigou would advocate measures to internalize the negative externalities associated with greenhouse gas emissions, mainly through the use of Pigou taxes, while considering mechanisms to mitigate the impacts on the most disadvantaged populations.

