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**Self-fulfilling prophecies ...**

**Sjak Smulders and Sophie Zhou**

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Rob Hart

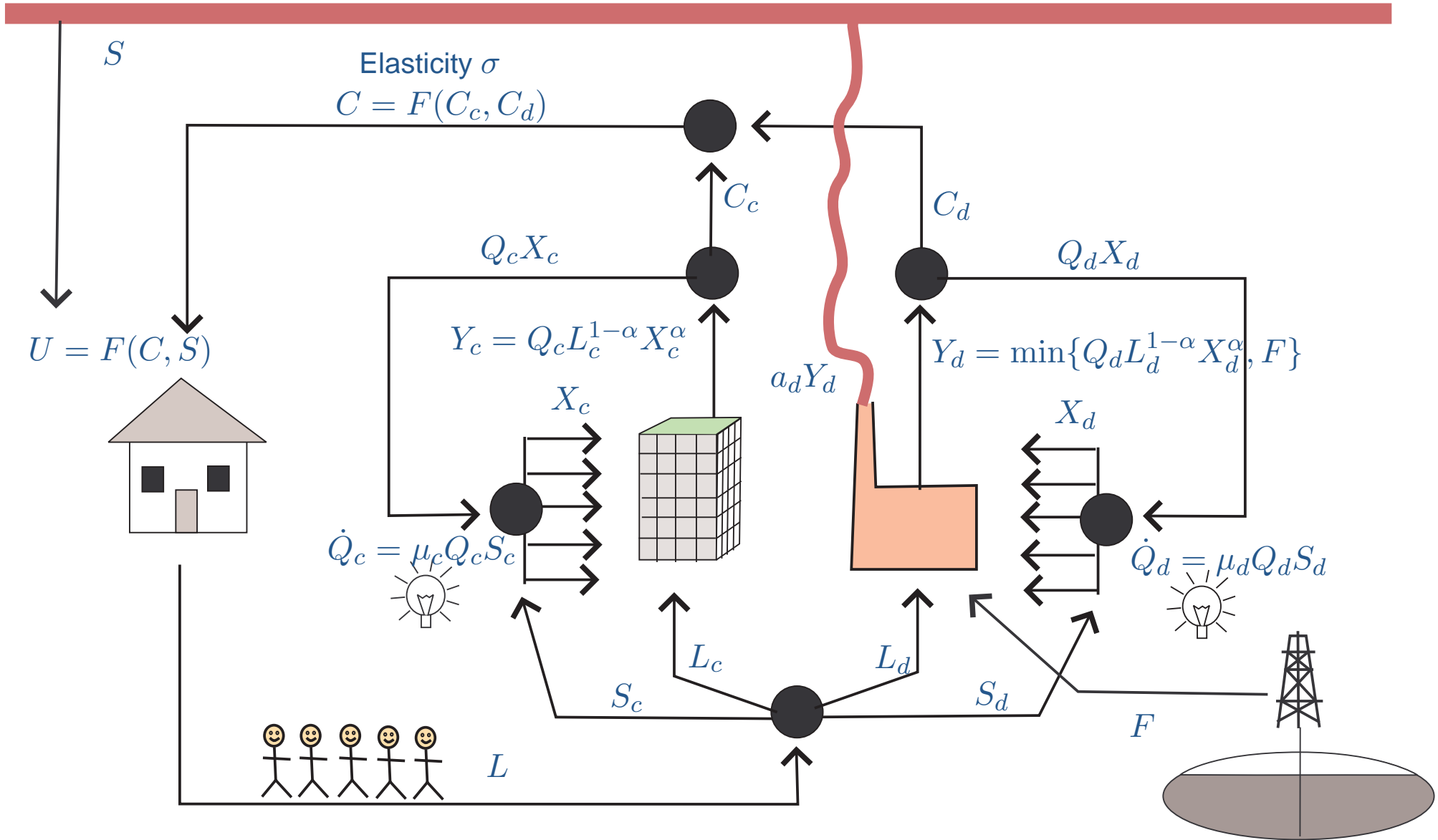
Bundesbank Spring Conference 2023

## Intro.

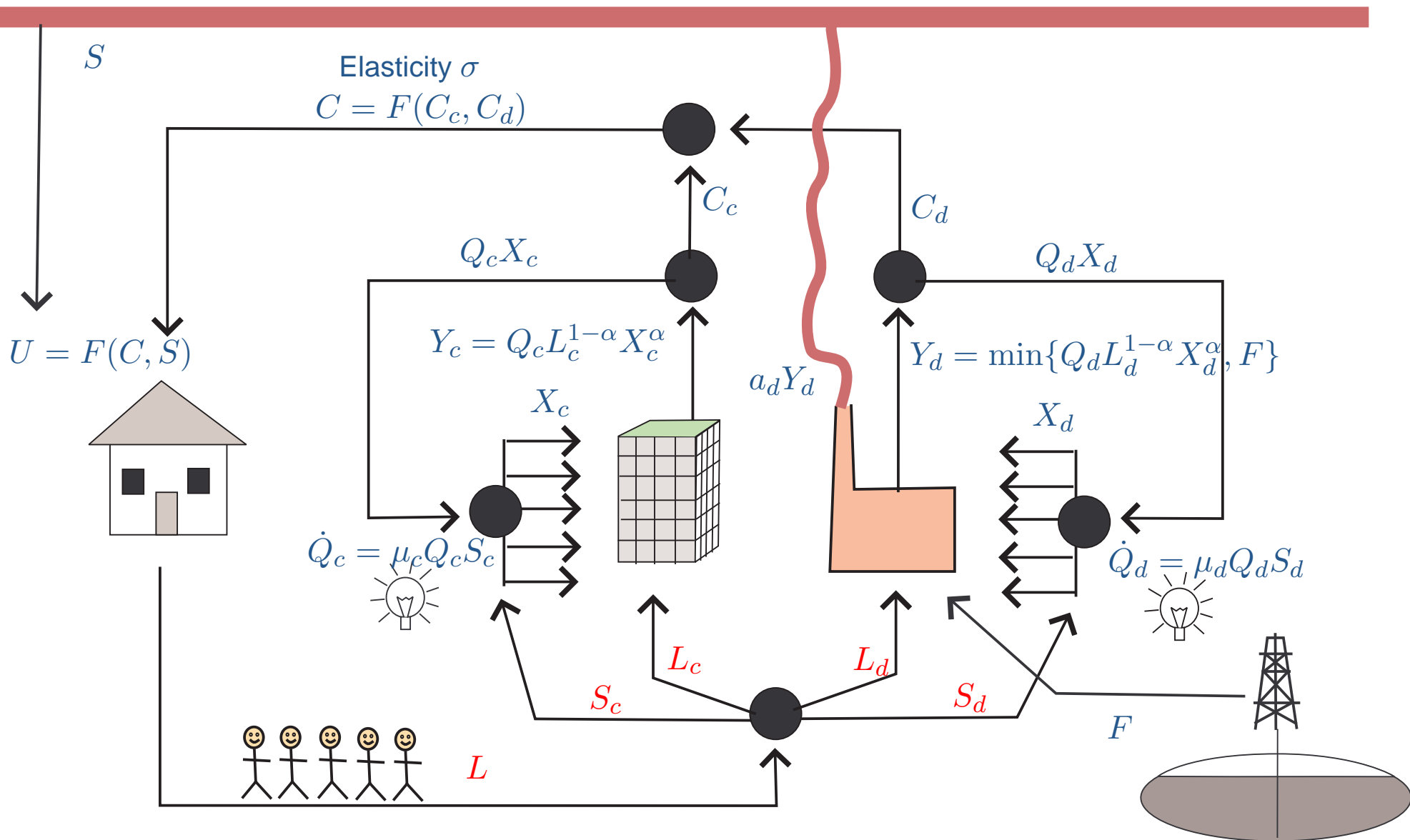
- Thanks to the organizers, and to Sophie for inviting me to discuss the paper.
  - Bold choice ...
  - But I like the paper :D
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- Quick overview of the model.
  - Then some comments and questions.
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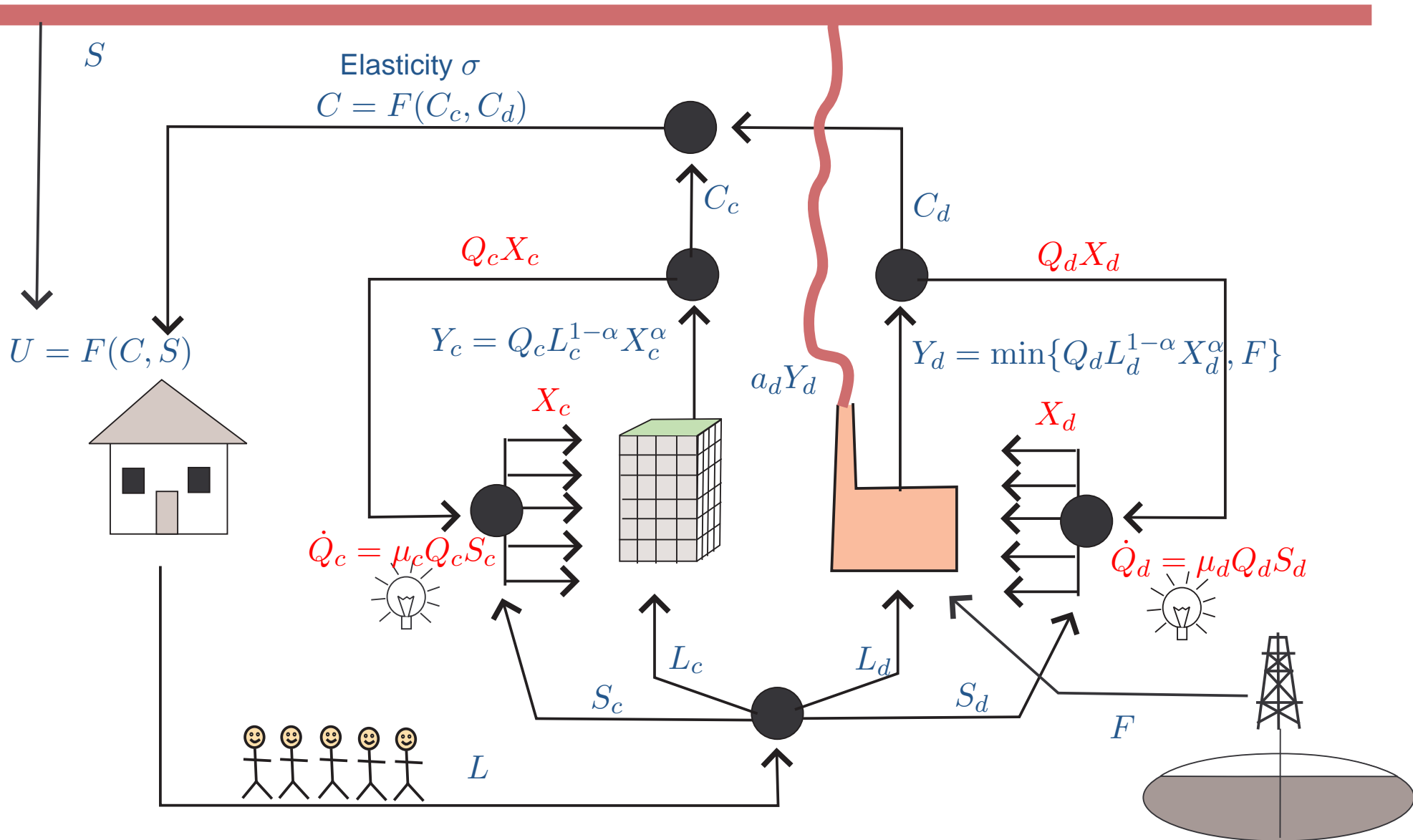
- Coordination problems clearly important in technology transitions ...
  - Nice contribution.
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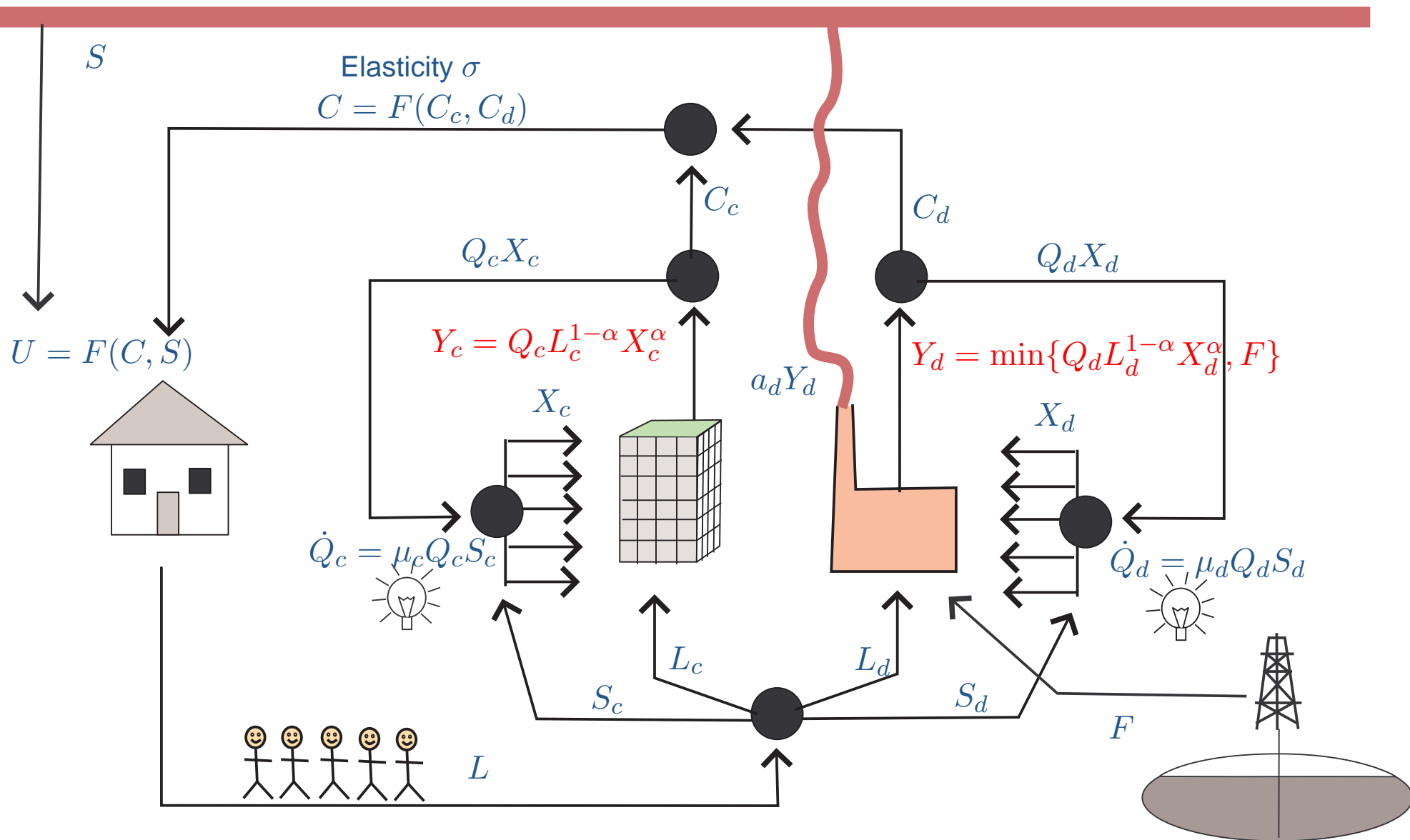
# Labour



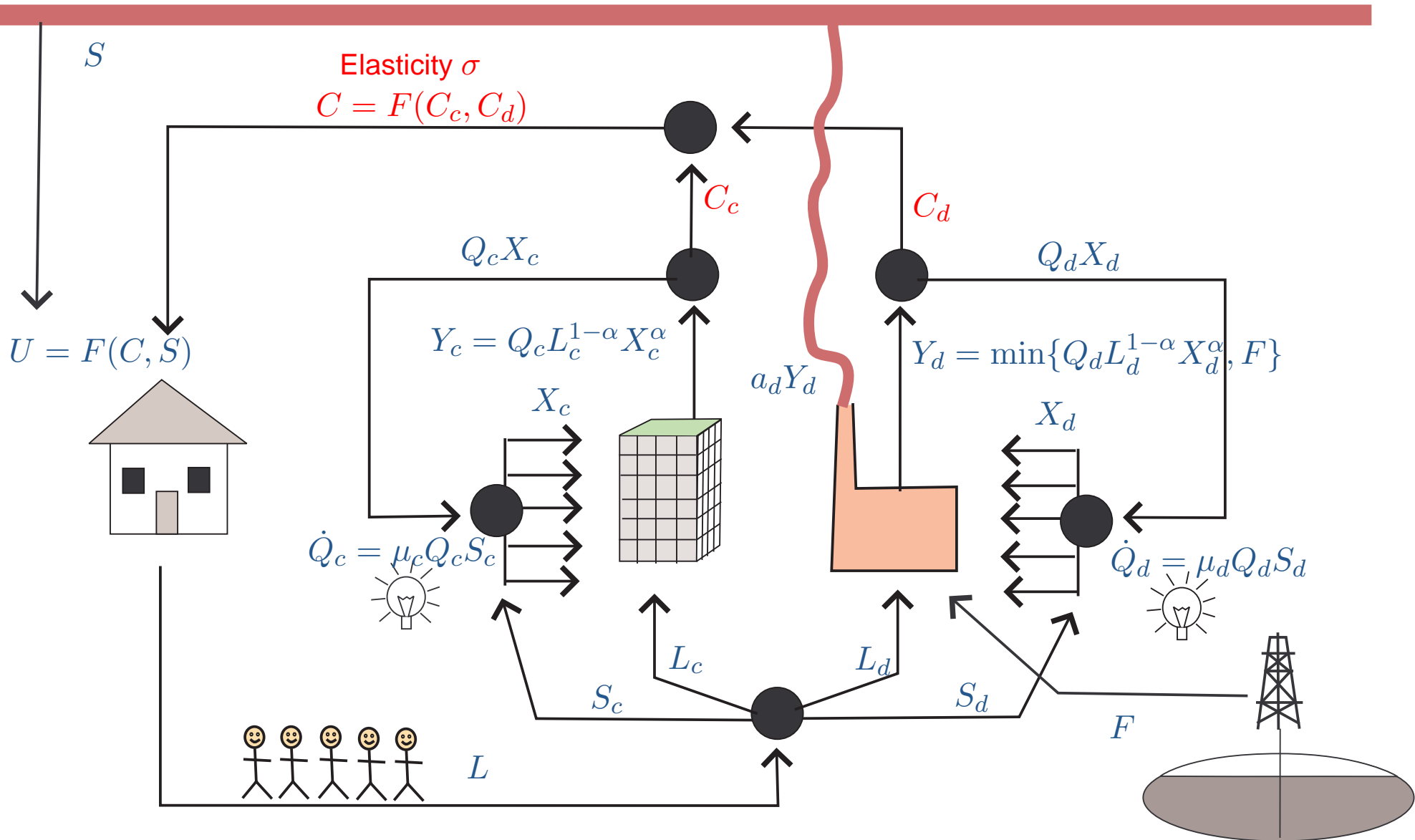
# Intermediate goods



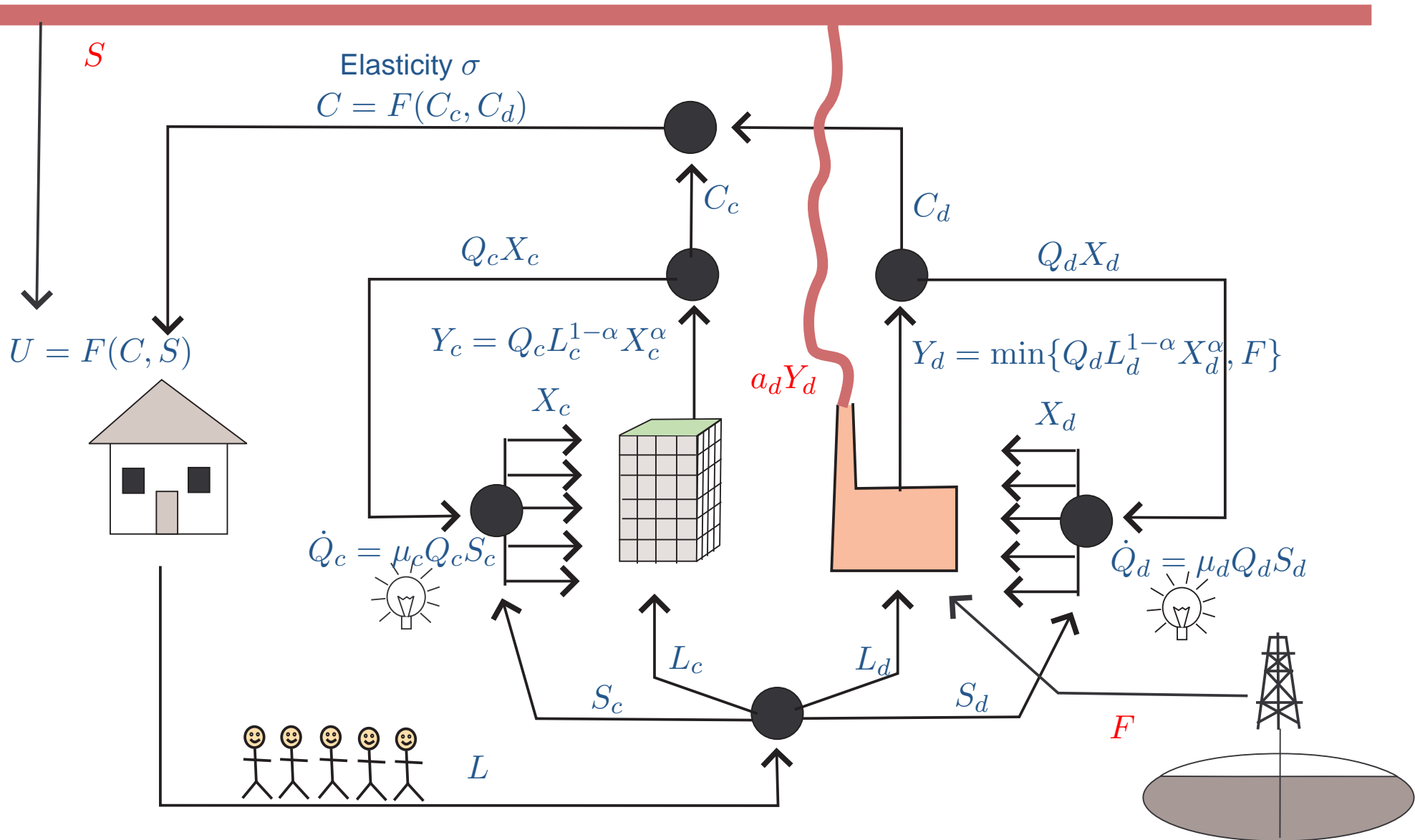
# Final goods



# Consumption

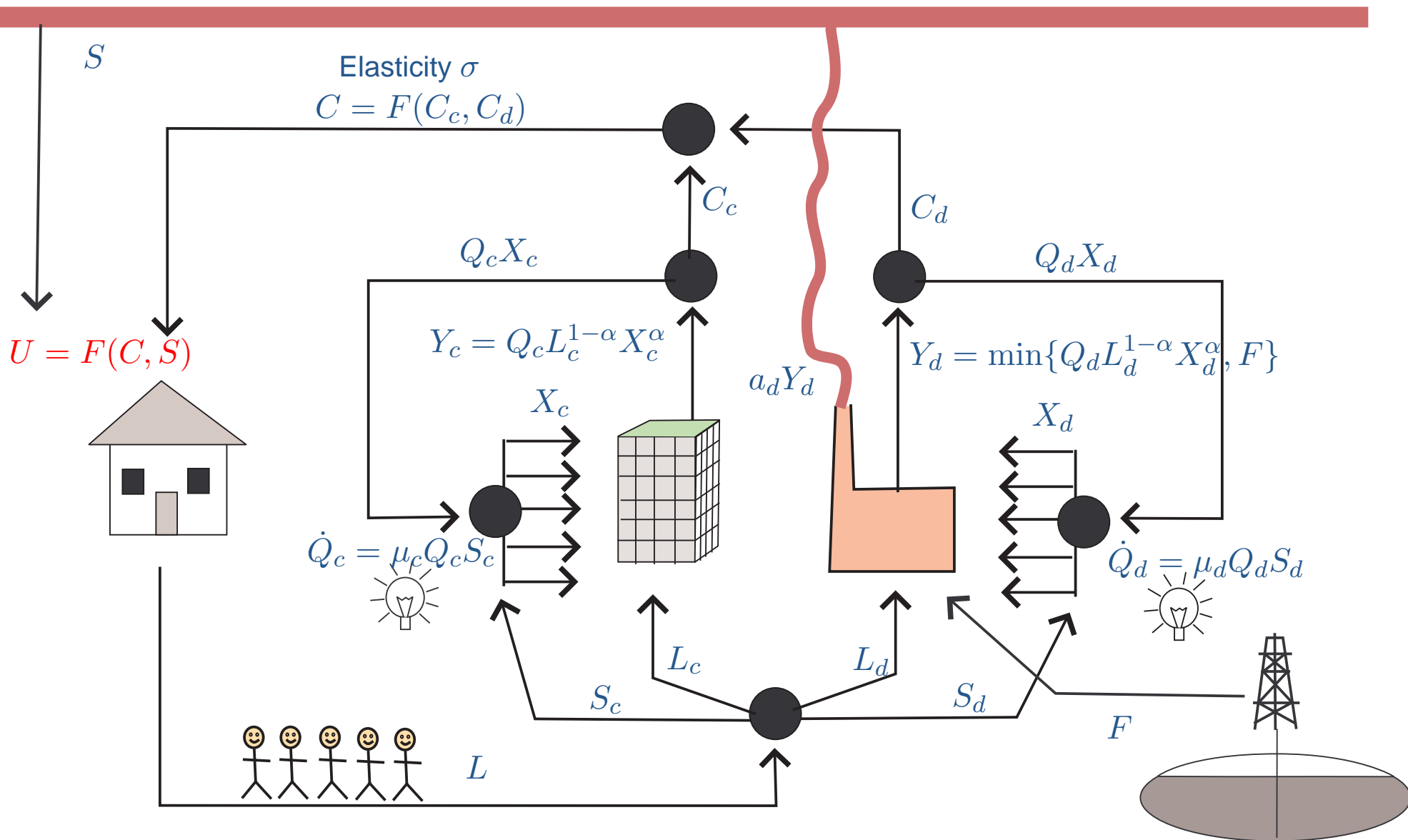


# Damages

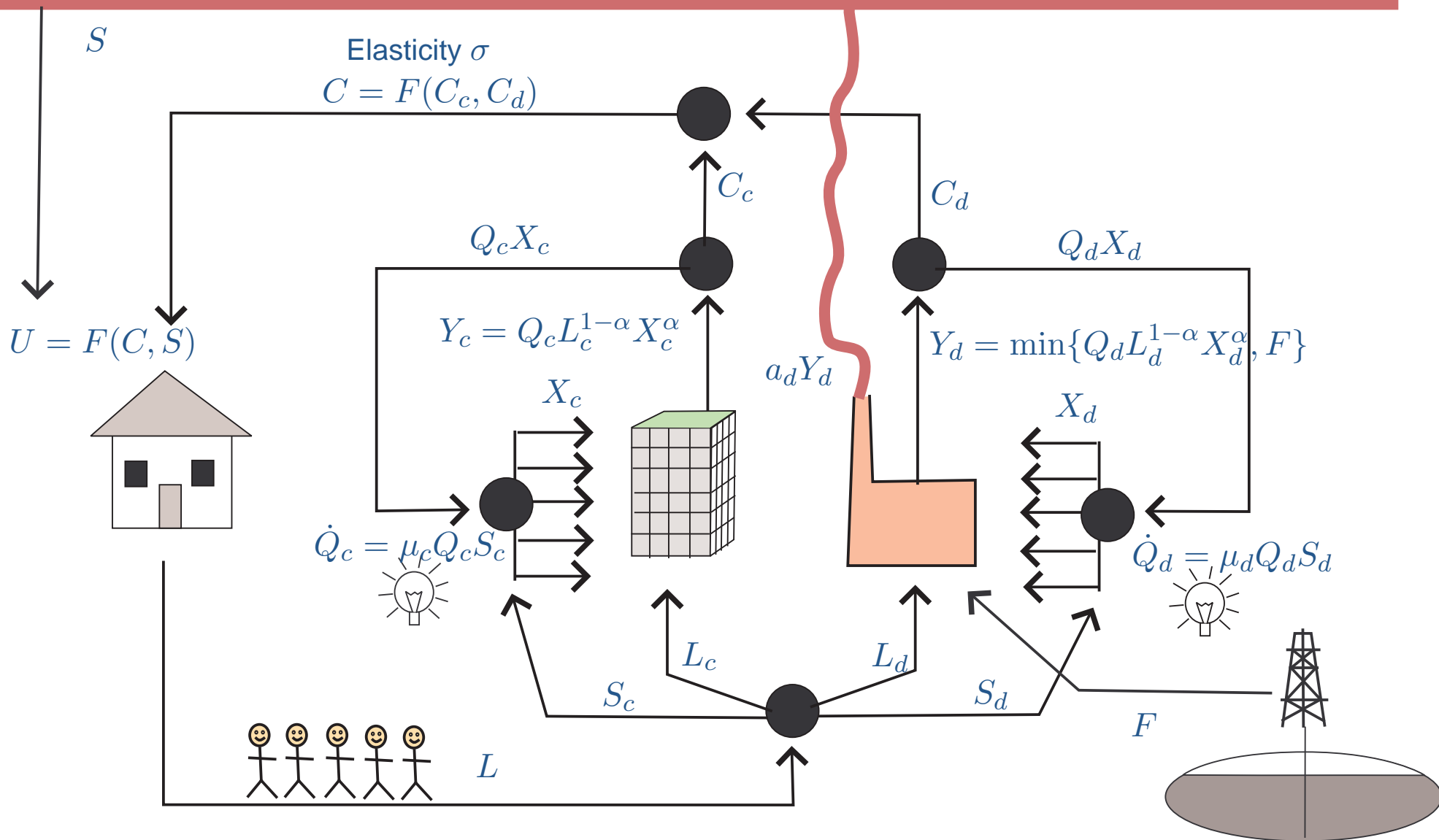




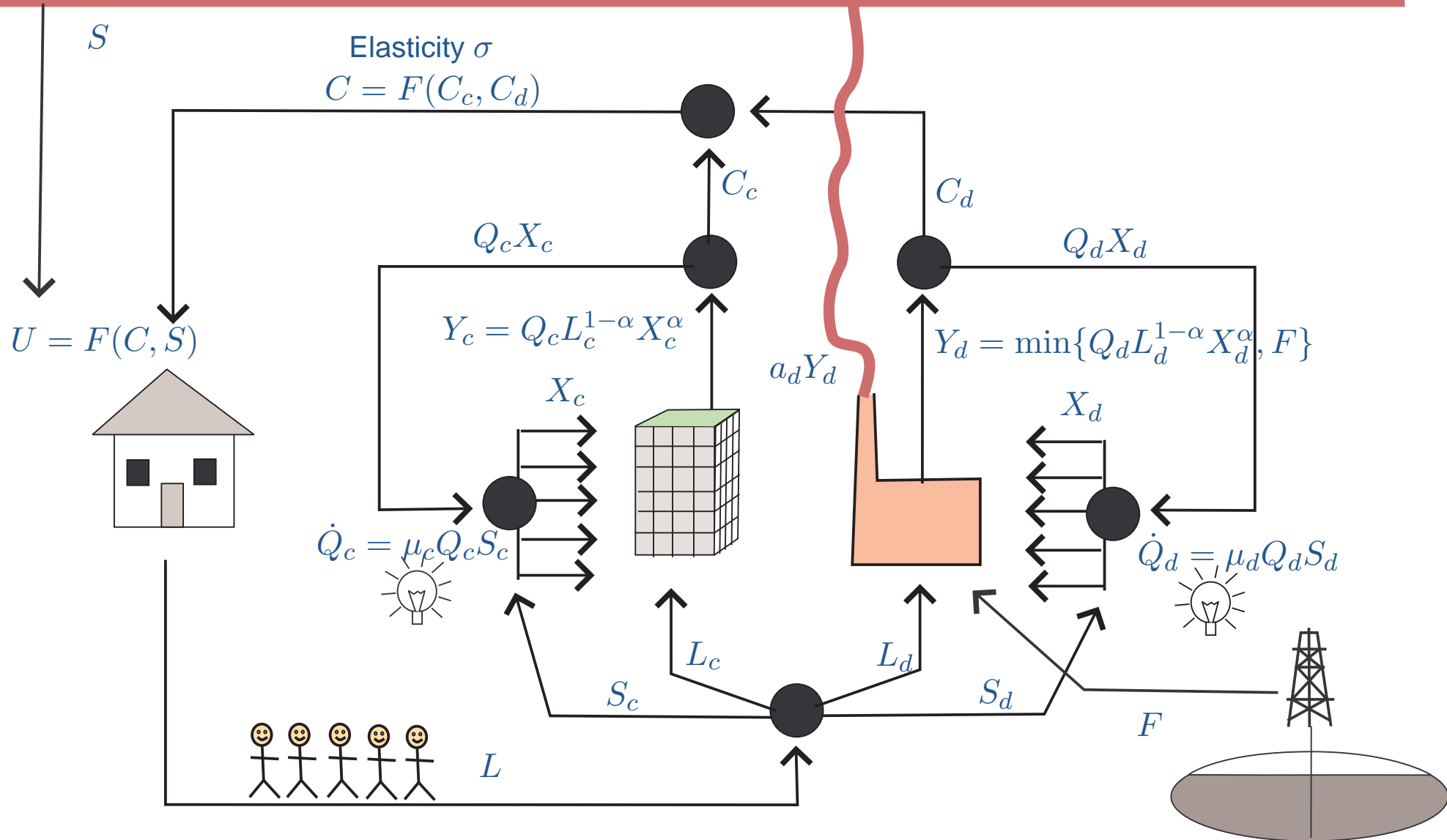
# Utility



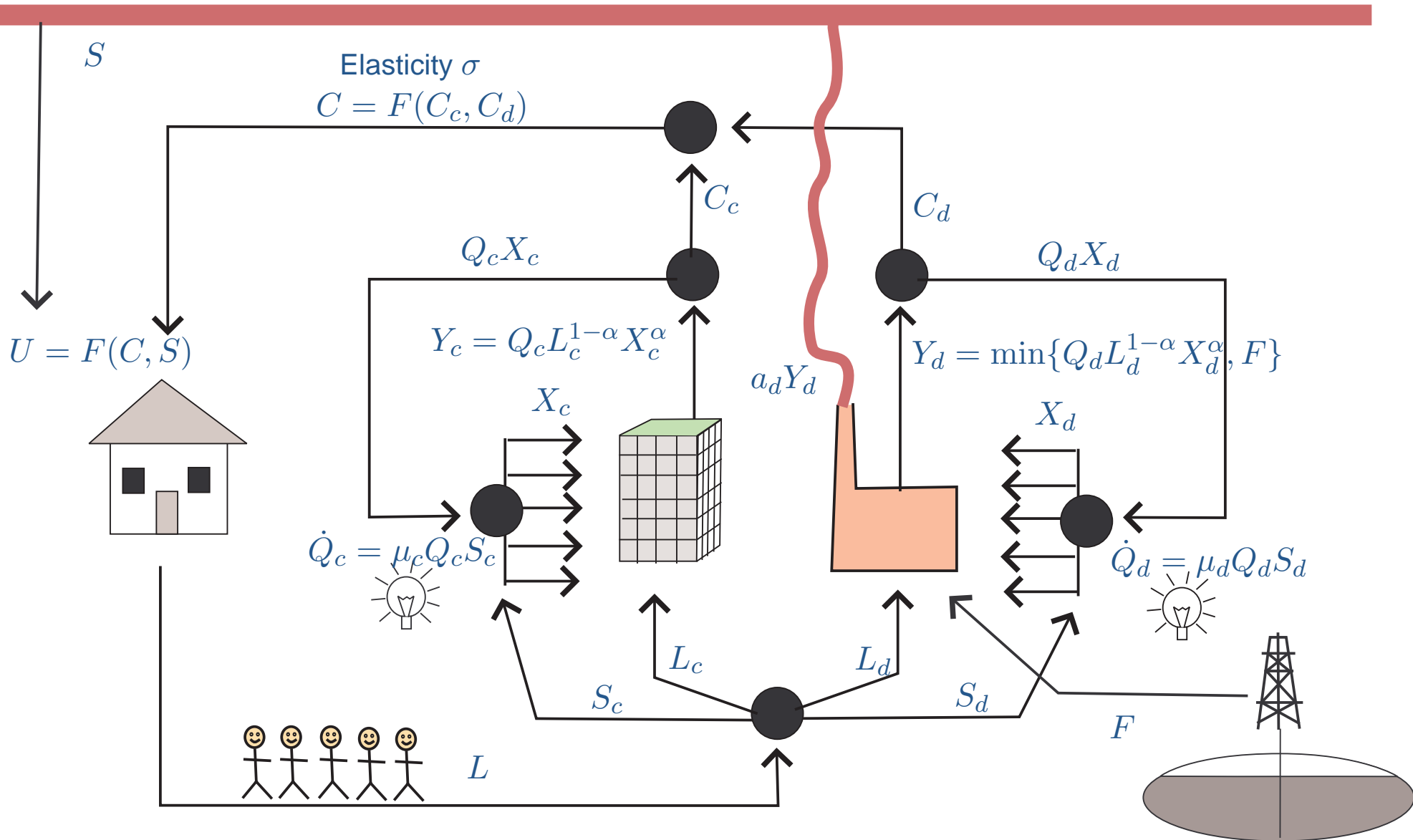
Researchers don't like it when they have to invest more to keep up, but like a bigger sector (which more aggregate investment delivers if  $\sigma > 1$ ).



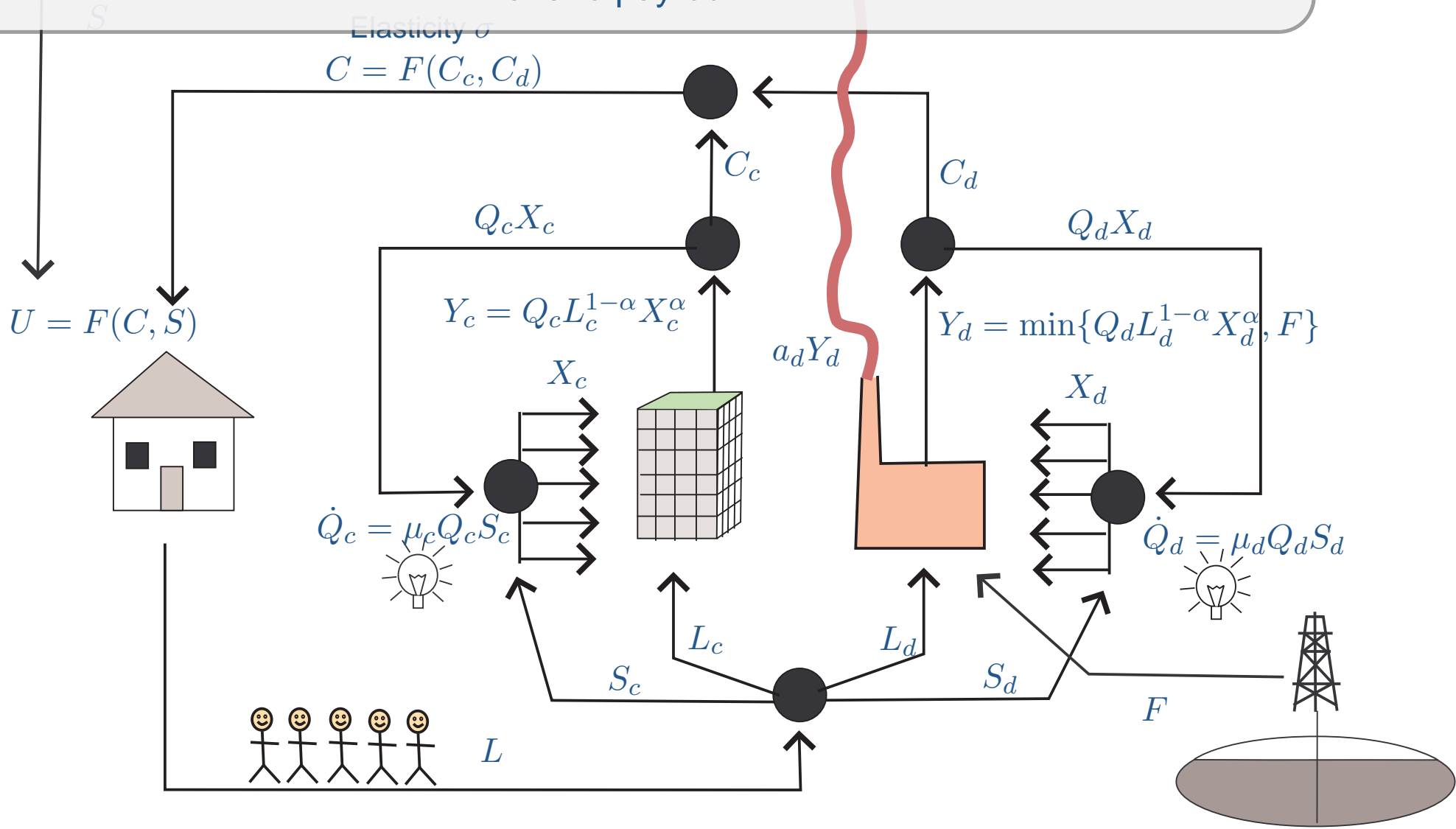
Hence if  $\sigma$  large enough firms want to invest in the same sector, and we may have a coordination problem with multiple equilibria.



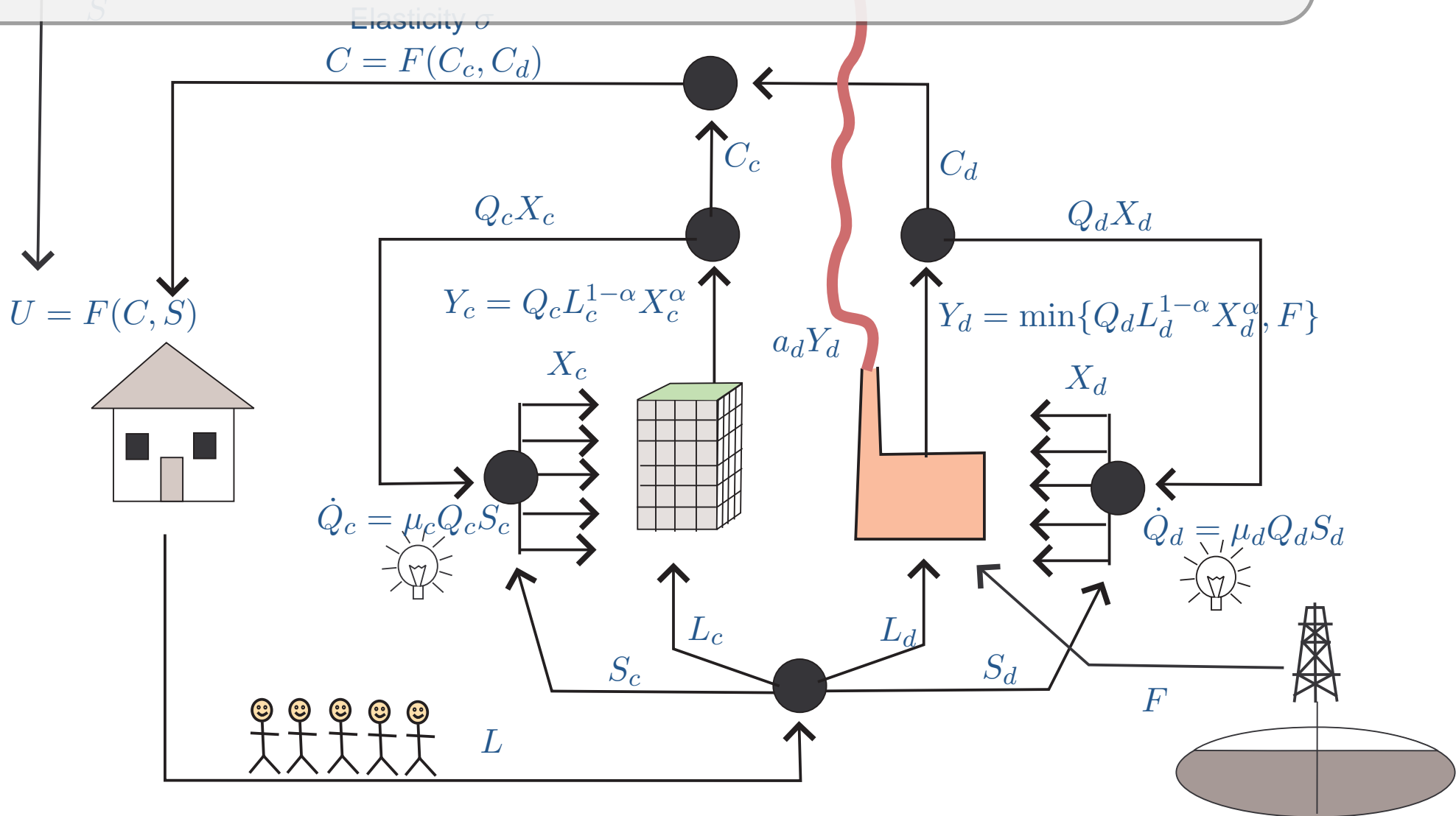
# Comments and questions ...

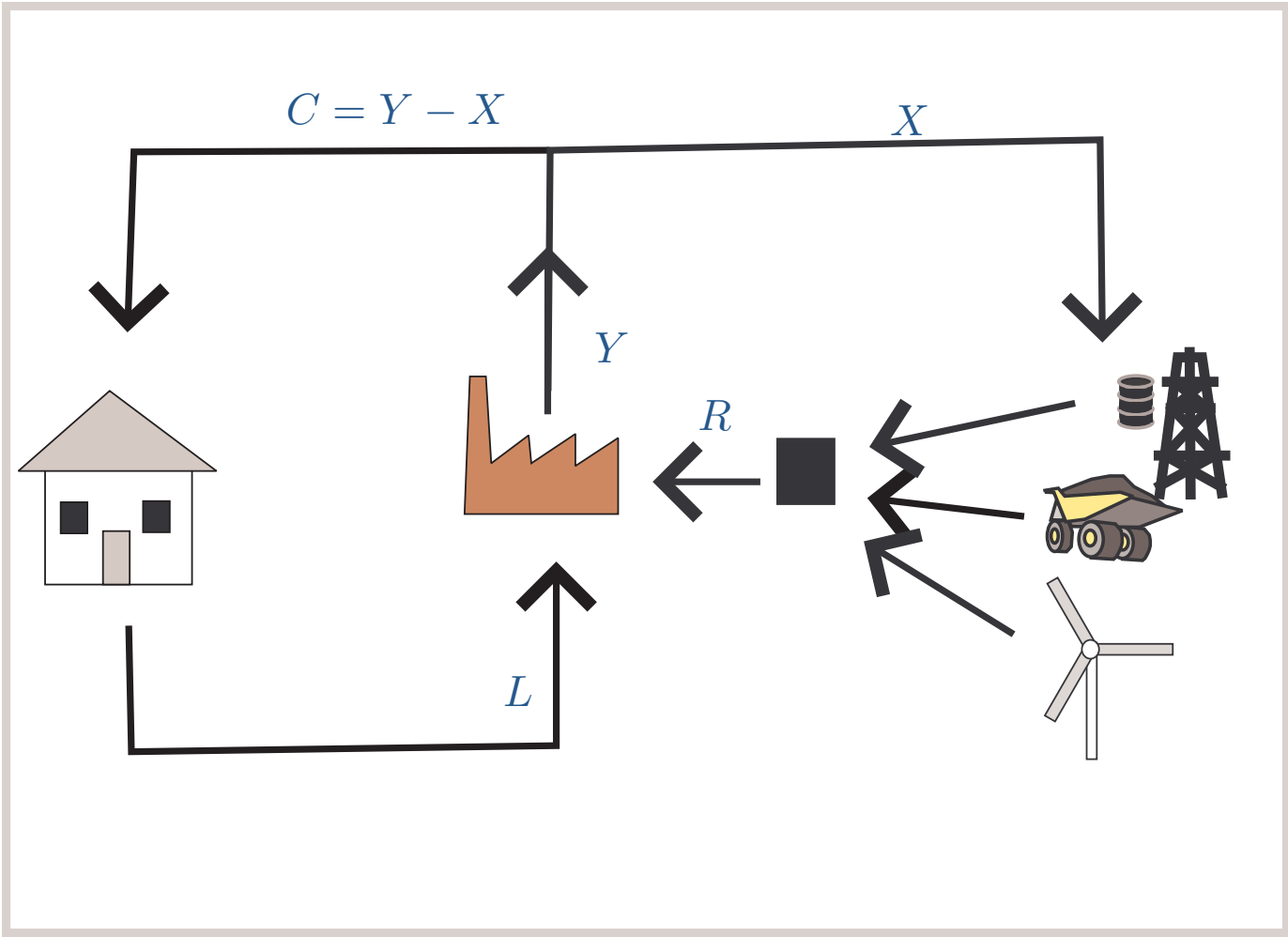


Policy. Following the idea of Heijmans, no payments need to be made to ensure coordination. Just offer those who invest in green free insurance against the outcome that others don't invest. Then all will invest and the regulator will never have to pay out.

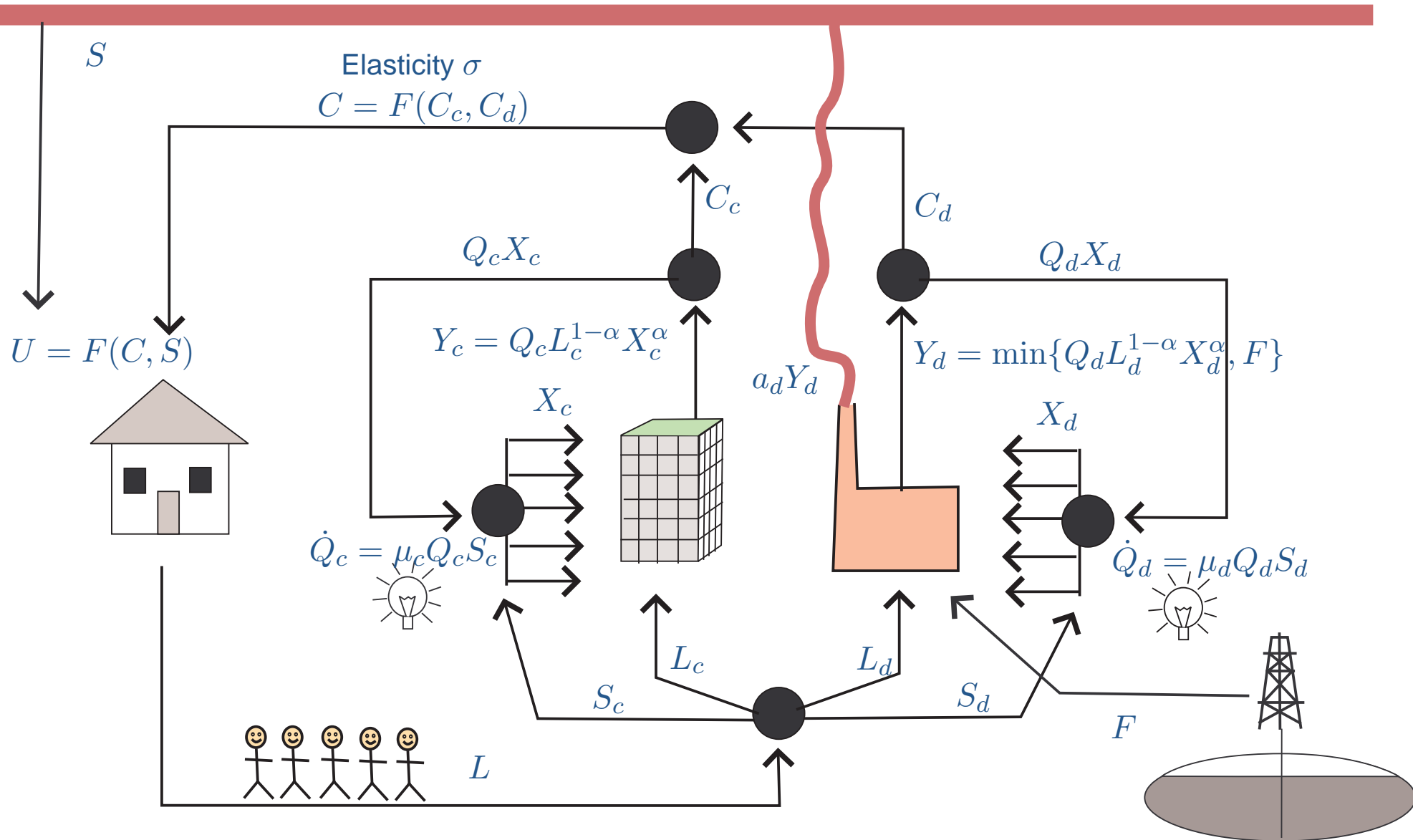


Model structure (1). The chosen structure—standard in this particular literature—doesn't make a lot of sense for energy-sector emissions, nor for industrial emissions. For these sectors the standard structure in most other literatures—see e.g. Golosov *et al*—should be used. Would the results carry over?



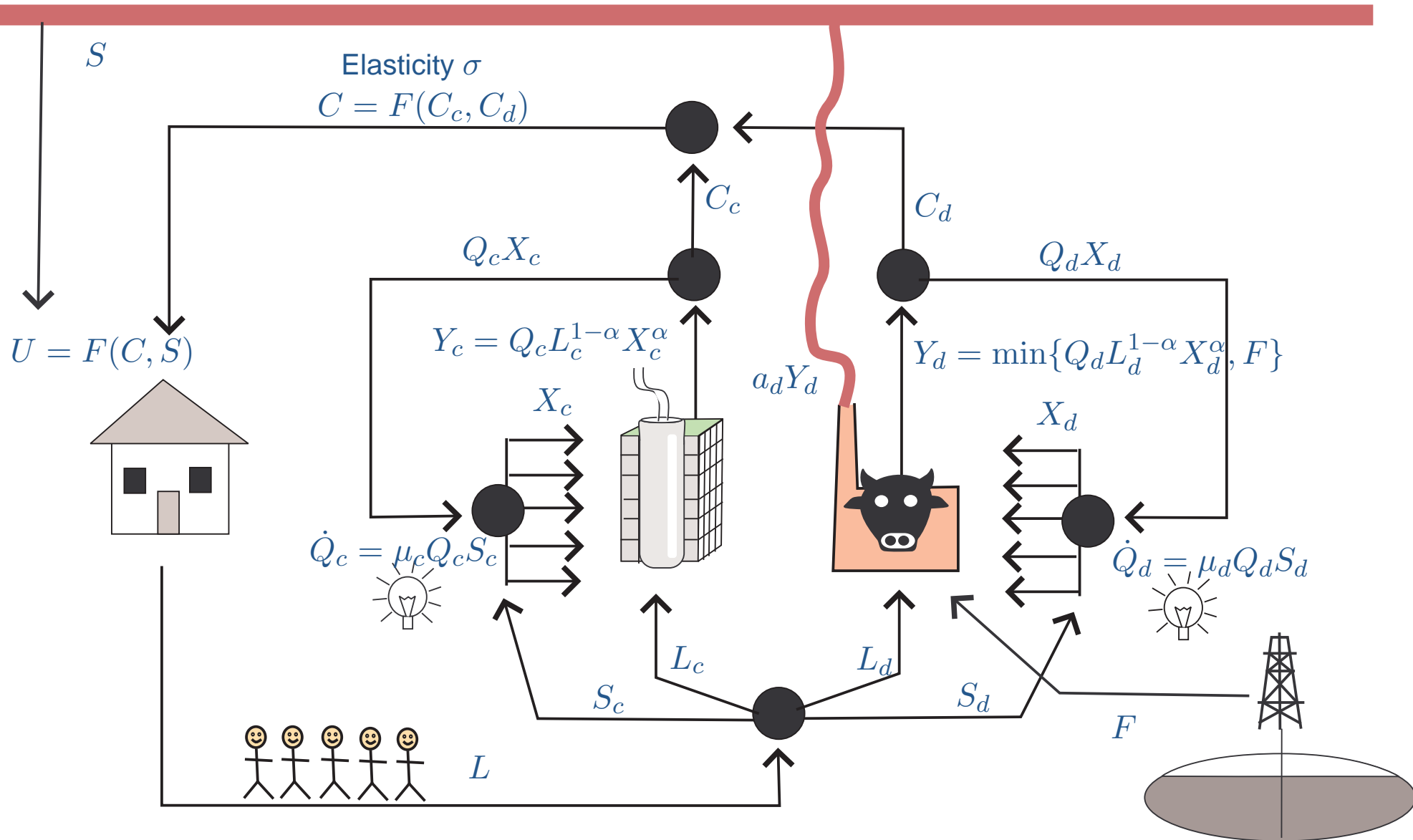


Model structure (2). Note that the structure does fit well to “beef / in vitro meat”,  
and OK to “flying / other”.

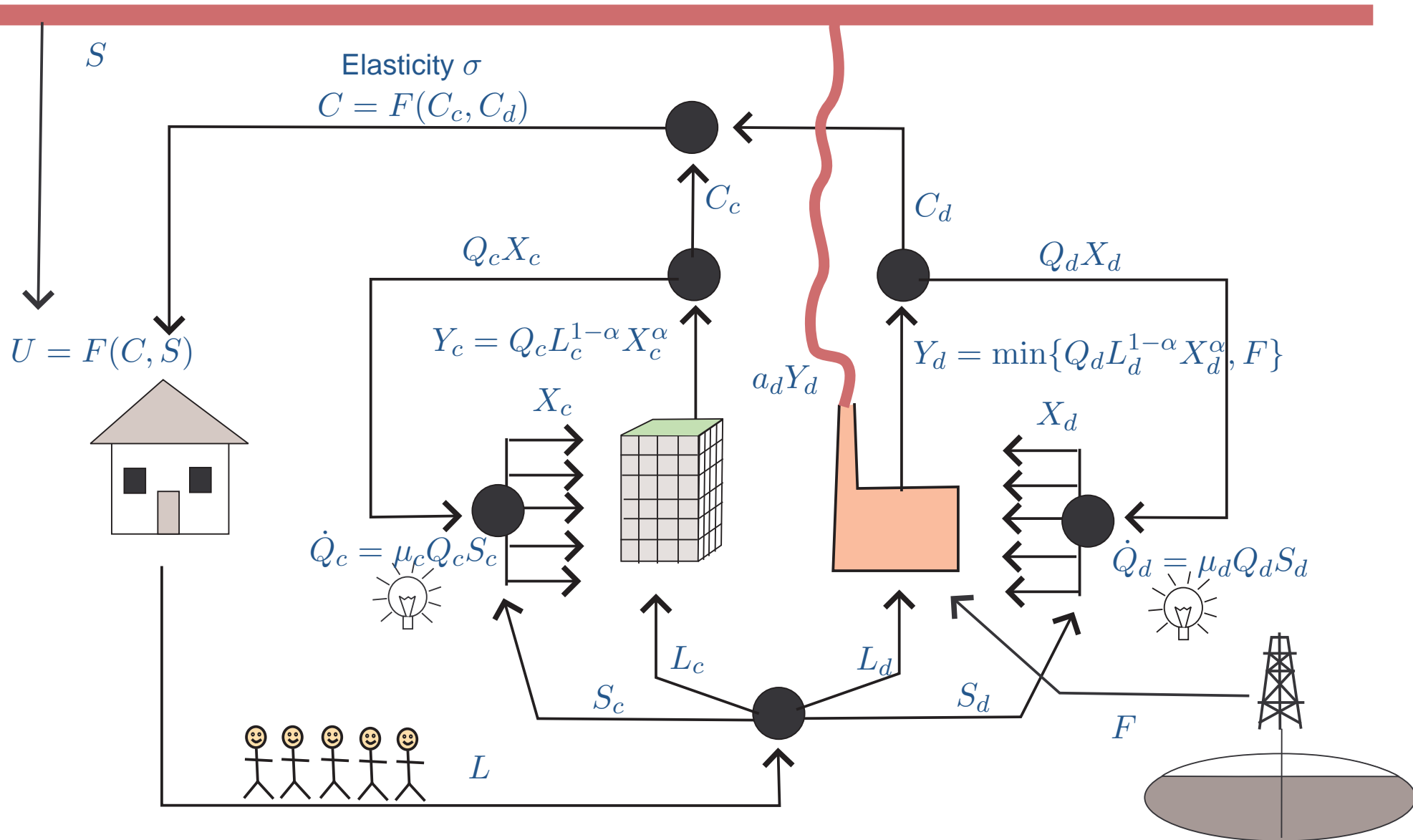




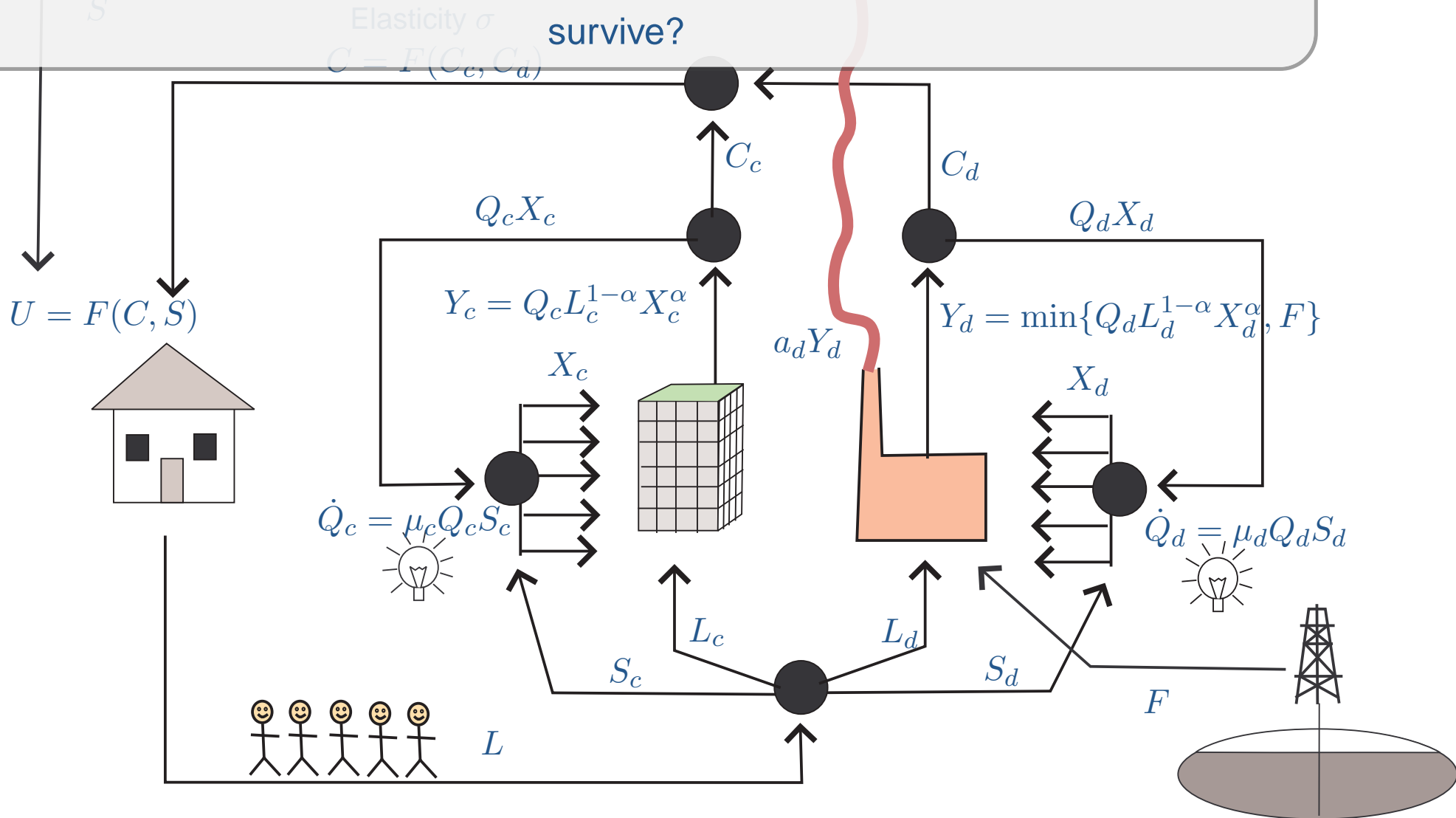
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Model structure (3). The implicit assumption of Leontief in the dirty sector should in my opinion be pointed out when it is used (but it never is).



Research. The assumption of pure labour as the research input supercharges DTC because if researchers also use stuff like computers (lab equipment) then progress in one sector (improving computers) would increase research productivity in all other sectors (which also use computers). Would the results survive?



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