We Are the Robots and We (May) Come in Peace

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Goal

We develop a macroeconomic model to analyse the effects of labor tasks automation. Our main focus is on labor market outcomes and distributional feedbacks.

More specifically... We are interested in generating a job polarization dynamic given skill biased technological change

The Model

We develop an Agent-Based Stock-Flow-Consistent model building upon A. Caiani, A. Godin, E. Caverzasi, S. Kinsella, M. Gallegati, J. Stiglitz (2016)

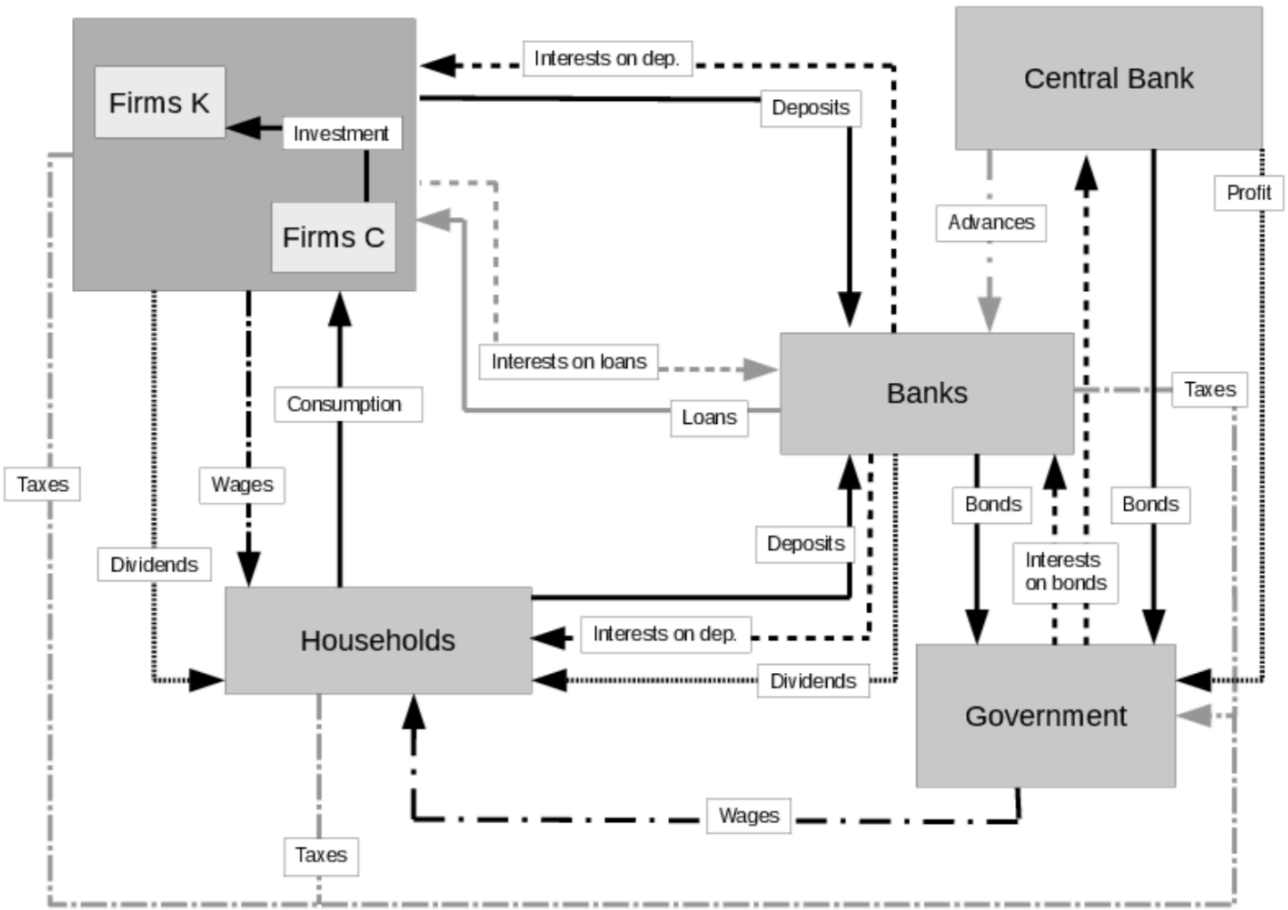
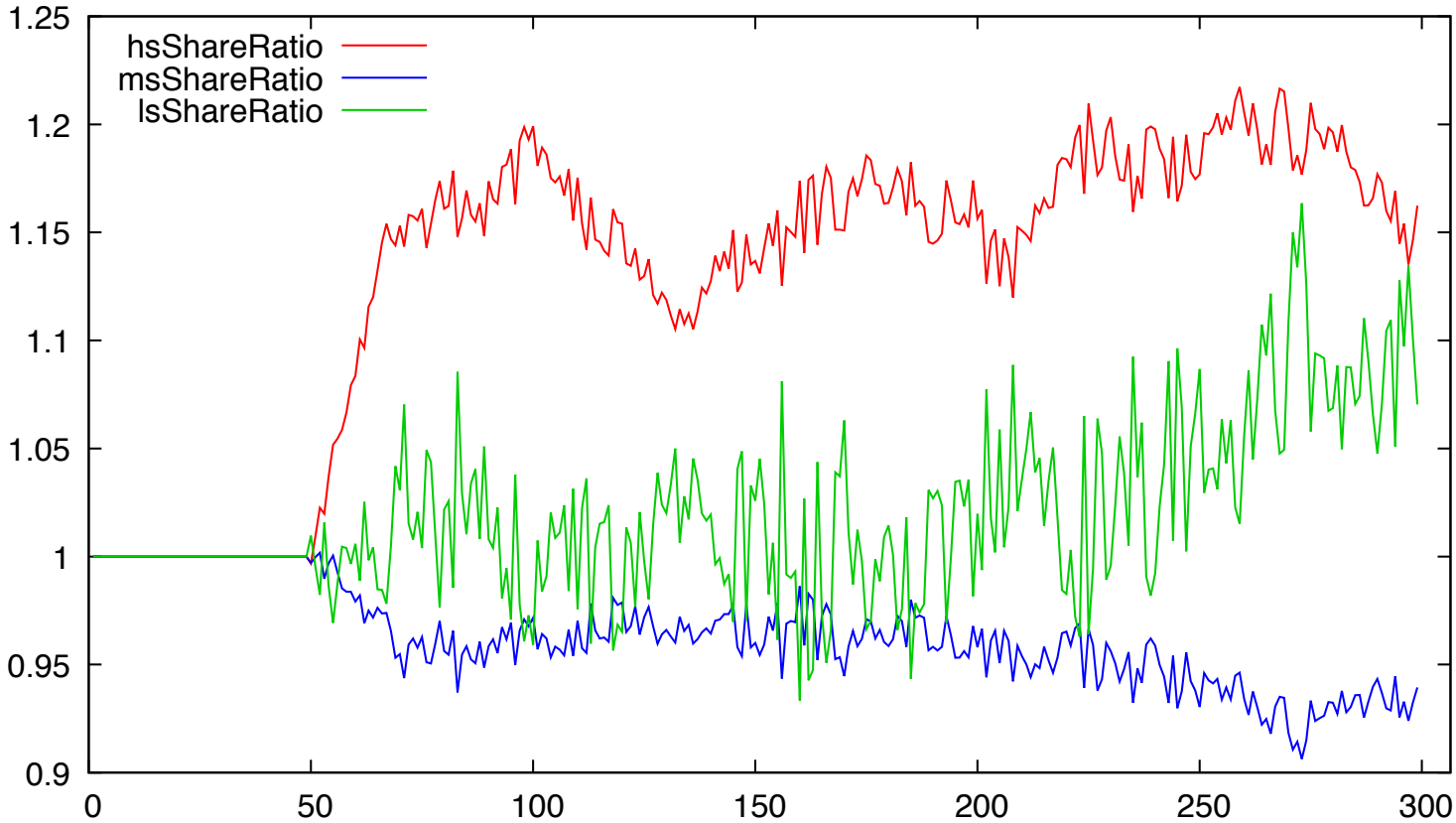


Figure 1: Flow Diagram of the model. Arrows point from paying sectors to receiving sectors.

Add-ons to the baseline

- Two final good sectors: manufactory Vs *personal* services
- Households heterogeneity: skills and preferences
- Robots Vs Machines: skill biased and labour saving

Results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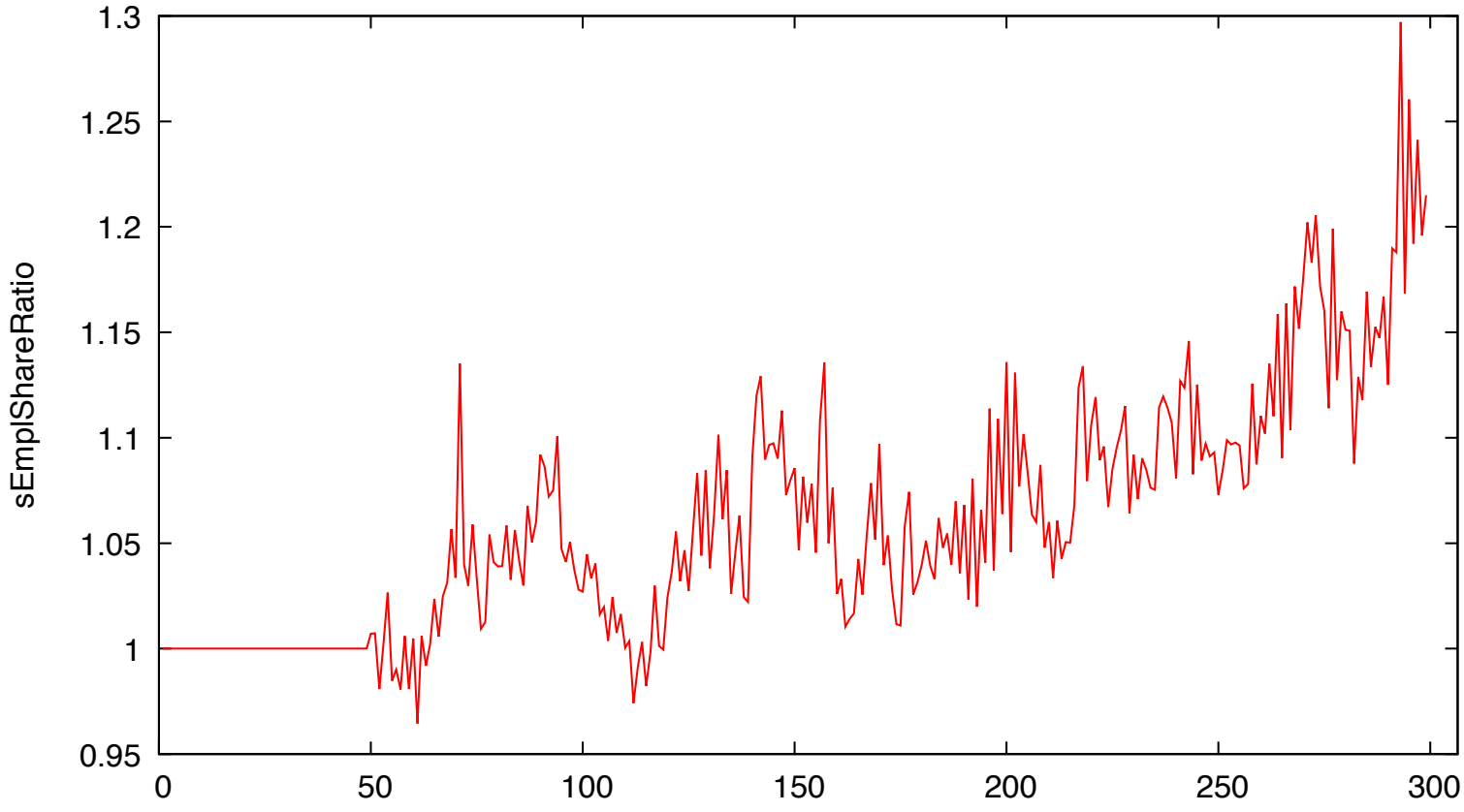
Results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Conclusion

Understanding the technical characteristics of new technologies is not enough. Distributional feedbacks and heterogeneity are key to understand the net effects of automation and technological change in general.