Introduction to “Trade Union, Economic Growth, and Income Inequality”

What is the question of the paper?
This paper explored unemployment, growth, and income inequality together in a unified model of a trade union and pointed out a property of the effective labor force which was used to explain how high unemployment and high growth can co-exist. The paper also discussed how the unionization effects on growth rate, income inequality and the labor income share.

Why should we care about it?
First of all, trade unions have played an important role in terms of governing an economy’s performance and the consequences of unionization are still controversial. Most previous research in the literature has investigated the issue of either equilibrium unemployment or economic growth separately and fails to capture some main empirical evidence in a unified model.

What is the author’s answer?
The effective labor force exhibits an intensive margin response in the sense that in response to higher unionization the number of employed workers decreases, but each individual employed worker provides more working hours. This intensive margin response leads to a possibility of the co-existence of high unemployment and high growth. Moreover, unionization gives rise to an ambiguous effect on income inequality, while it has a positive effect on the labor income share and growth rate.
In one numerical study, the author showed that the elasticity of substitution between labor and capital plays important role in governing the steady-state consequences and affecting the impacts of unionization.

How did the author get there?
The author first introduced a unionized economy consisting of four types of agents: households, firms, a national trade union, and a government and analyzed the setting of all these agents, especially considered the collective bargaining between national trade union and firms and the optimization of households. Through the analysis above, the author got the Balanced-Growth-Path Equilibrium and investigated the issue of income inequality to reach the conclusion about the effects of unionization.
In the numerical examination, the study ensured the analytical results and explored the steady-state effects of the elasticity of substitution between
effective labor and capital and its role in terms of governing the effects of unionization.

**Notations:**

- **k**: physical capital firms hired
- **l**: employment rate
- **Y**: final good
- **E**: effective labor force
- **h**: working time
- **A_1(K)**: positive production externalities for effective labor
- **A_2(K)**: positive production externalities for capital
- **π**: firm's profit
- **w**: wage rate per hour
- **r**: the rental rate of capital
- **T**: lump-sum tax
- **b**: unemployment benefit
- **θ**: relative bargaining strength of the union
- **k_i**: share of individual i in the aggregate stock of capital K
- **C**: consumption
- **μ**: unemployment rate
- **x**: transformed variable, \( x = C/K \)
- **γ_K**: growth rate of capital
- **γ_C**: growth rate of consumption
- **σ_y**: income inequality
- **S_E**: labor income share