

Quiz 6 — Romer's (1986) model: past exam questions

Questions	Answers
1. [Final 2021] What exactly is the knowledge-diffusion externality in Romer's (1986) model?	☐ The externality comes from the fact that the planner's problem does not coincide with the decentralized equilibrium. ☐ The externality comes from the fact that A_t is the same for all firms. ☐ The externality comes from the fact that taxation is distortionary. ☐ In its own problem, firm i takes into account only the direct effect on its own output of an increase in its capital $K_{i,t}$, whereas such an increase also raises the output of all the other firms.
2. [Final 2021] Which kind of economic policy corrects this externality in Romer's (1986) model, so as to implement the socially optimal equilibrium?	☐ A subsidy to firms' investment. ☐ A tax on firms' investment. ☐ A subsidy on asset income financed by a tax on labor income. ☐ None of the above.
3. [Final 2021] In the models seen in class, does the existence of constant returns deliver endogenous growth and/or conditional convergence?	☐ Endogenous growth and conditional convergence. ☐ Exogenous growth and conditional convergence. ☐ Endogenous growth and no conditional convergence. ☐ Exogenous growth and no conditional convergence.
4. [Final 2022] Name one limitation of Romer's (1986) model.	☐ It does not reproduce the constant share of capital income in national income. ☐ It predicts neither absolute nor conditional convergence of the $\ln(y_t)$ across countries. ☐ It conjectures the form of A_t , which ensures that the constant social returns to capital exactly offset the decreasing private returns to capital. ☐ Since the form of A_t is imposed and fixed, it is an exogenous growth model.

Questions	Answers
5. [Final 2023] Is the accumulation of knowledge intentional and/or remunerated in Romer's (1986) model?	☐ Intentional and remunerated. ☐ Intentional and not remunerated. ☐ Unintentional and remunerated. ☐ Unintentional and not remunerated.
6. Which assumption of the first welfare theorem does Romer's (1986) model fail to satisfy?	☐ There is an externality. ☐ Markets are not perfectly competitive. ☐ Markets are not complete. ☐ Agents do not interact.