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What does academic mismatch mean?

(JMP Abstract)

I examine the causes and macroeconomic consequences of academic mismatch—that is, the measured departure from perfect assortative matching—between student ability and college quality. I build a general equilibrium heterogeneous-agent model with college enrollment decisions. Agents receive noisy signals about their ability and face borrowing limits, psychic costs of education, and college capacity constraints. I measure that 44% of students are mismatched, and most of the mismatch is undermatch: high-ability students do not go to college or attend lower-quality colleges.

I estimate ability premia against college quality and find evidence of complementarity between ability and quality. I also estimate enrollment rates at various colleges against student ability. I find that the primary source of mismatch is the interaction of psychic costs (idiosyncratic tastes for colleges) with capacity constraints. If psychic costs are eliminated but capacity constraints are not relaxed, then mismatch rises by 15%. Capacity constraints themselves only account for 3% of the mismatch. However, if both psychic costs and capacity constraints are removed, mismatch falls by 40%. Noisy signals about ability account for 7% and borrowing limits have little effect. I also find that the measure of mismatch does not help predict changes in output and welfare; output and welfare could go up or down in response to a fall in measured mismatch. If mismatch increases due to a change in psychic costs, output also increases. In addition, if agents are sorted by ability and placed into colleges by decreasing quality, mismatch falls to its minimum level but welfare also falls.

JEL: E24, I23, I26, J24

Keywords: Academic Mismatch, Higher Education, Human Capital, Aggregate Human Capital