

# College Majors and Labour Market Mismatch\*

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## Abstract

This paper studies the extent of skill mismatch across college major-occupation combinations. We propose a general equilibrium framework to measure mismatch through output loss. The model relies on the estimation of college-occupation returns based on the Roy model. Using Australian administrative tax panel data merging employment history and university degree information, we find sizeable output losses, up to 13 percent, from workers allocating to occupations not well linked to their majors. Our results suggest that (1) Commerce and STEM-related fields (IT and Engineering) are the main drivers of mismatch, and (2) government education subsidies broadly increasing college attendance exacerbated mismatch, increasing output loss by up to 7 percent, and heightening the persistence of mismatch over the life cycle.

**Keywords:** Mismatch, College Major, Occupation, Roy Model, Administrative Tax Record

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