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CAPITAL EXTERNALITIES IN TWO-SECTOR MODELS

Alain VENDITTI

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Capital Externalities in Two-Sector Models*

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Abstract: We consider a two-sector economy with positive capital externalities and constant social returns. We first show that local indeterminacy does not require external effects from labor but is fundamentally based on externalities derived from capital in the investment good sector. Second, we show that the external effects in the investment good sector has to be characterized by a low enough amount of capital stock from the consumption good sector. In other words, the existence of multiple equilibria is ruled out if the externalities are too intersectoral.

Keywords: Infinite horizon models, sector-specific and intersectoral capital externalities, constant social returns, indeterminacy.

Journal of Economic Literature Classification Numbers: C62, E32, O41.

^{*}I am infinitely delighted to contribute to this special issue in honor of Kazuo Nishimura. During my PhD, he has been a teacher, working on his outstanding contributions to optimal growth theory and intertemporal equilibrium models. A few years later, I had the immense privilege of meeting him and starting a fantastic collaboration with him. Now Kazuo is a wonderful friend. I am extremely happy to acknowledge his influence on my work and to thank him for his confidence. I also thank an anonymous referee for useful comments and suggestions.