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CONSISTENT CONJECTURES IN A HUMAN MIGRATION MODEL: DEFINITION, EXISTENCE AND COMPUTATION

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Abstract. *In this paper, we develop a human migration model using the concept of a conjectural variations equilibrium (CVE). In contrast to previous works, here, we apply a special technique to verify the consistency of the conjectures (influence coefficients). Existence and uniqueness results for the thus defined consistent conjectural variations equilibrium (CCVE) are also established.*
Keywords: Human migration model, Variational inequality formulation, Consistency criterion, Consistent conjectural variations equilibrium

1. **Introduction.** Migration problems are studied intensely in many countries throughout the world. In the due time period, various migration theories have been developed. In the short historical aspect, one may rely on the fundamental survey [1]. The main trends revealed in the survey are as follow.

One of the traditional models of migration is the neo-classical/labour-flow approach, in which migration is viewed as a response to regional market disequilibrium. The main disadvantage of the labour-flow models, however, is that it is difficult for these models to explain differences in migration behaviour for what otherwise appears to be comparable individuals (*cf.* [1]).

Human capital models develop another scheme and treat migration as an investment decision in which individuals calculate their present discounted value of expected returns in every location. Empirical modelling of flows relates the expected present value of a move to individual characteristics, such as age, education, occupation, employment status, sex, race, marital status and family size, of which the following two are particularly important. This model has not only advanteges but also certain minor points. A move is normally viewed as an irrevocable lifetime decision and, in concentrating on income, the model ignores many non-pecuniary aspects of a move, differences in the consumption activities of the potential migrant and financing the move (*see* [1]).