Studies on International Migration Theories: Macroeconomic Policies and Remittances

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Summary

This thesis performs theoretical analyses of international migration of labour regarding the welfare of the labour receiving and sending countries, utilising the optimisation method adopted in engineering.

International migration affects the welfare of the labour receiving and sending countries through various channels such as government policies, the transfer of the money from the migrant to the left behind, brain drain and brain gain, education, human capital formation, etc.

Among these I focus on government policies and the transfer of the money under the mobility of labour, and attempt to reveal how international migration affects the welfare of the countries involved in international migration through macroeconomic policies and remittances, observing the economy macroscopically and microscopically, respectively.

The first three chapters conduct analyses, observing the economy macroscopically. I attempt to find how the welfare of labour receiving and sending countries is related to macroeconomic policies by solving the optimisation problem with constraints and derive policies that help make the economy optimal as a system.

I first assume a small open economy with dual labour markets; i.e., a primary labour market that is non-competitive and for skilled labourers and a secondary labour market that is competitive and for unskilled labourers. In this economy, there are a union this is comprised of skilled workers and the policy authority that manipulates the money stock. The foreign workers who are in the labour receiving country cannot participate in the labour markets as freely as native workers since impediments such as the discriminatory behaviour of the union or the discriminatory structure of labour markets against foreign workers make it difficult for them to participate in labour markets. On this basis, I assume that only some of them can enter the labour market. Two cases are analysed, one in which the union and the policy authority behave non-cooperatively, and another in which they behave cooperatively.

I show that the economy's welfare, i.e., the sum of the union's and policy authority's utilities increases in both cases as unskilled foreign workers have more access to the secondary labour market. However, the economy's welfare does not always increase as skilled foreign workers have more access to the primary labour market. In particular, under cooperation, the economy's welfare might decrease with the increasing accessibility of skilled foreign workers to the primary labour market.

I derive implications from these results that if we want to increase the economy's welfare by encouraging unskilled foreign worker participation in the secondary labour market, we have to eliminate the discriminations that prevent their participation in this labour market. We also have to implement policies that mitigate the decreases in the union's utility caused by the increases in union membership of skilled foreign workers, in order to encourage their employment.

In order to derive the sound results regarding the effects of macroeconomic policies under the mobility of labour, the number of immigrating or emigrating workers must be determined in an endogenous manner. To realise this, Chapter 2 replaces a small open economy with a two-country economy where workers move between the countries due to the differences in wages. This chapter also models the labour market by introducing an efficiency wage hypothesis that is more plausible than the union model or perfect competition. In such a framework, I address the problem of whether the independent policy authorities in the two countries should cooperate or not.

I reveal that not only the utility of the policy authority but also that of workers is higher under inter-government cooperation than under non-cooperation, provided that migration flows are sufficiently sensitive to changes in real-consumption wage differentials between the countries.

This result suggests that under the mobility of labour cooperation between the independent policy authorities can be effective in enhancing the welfare.

Chapter 3 advances the analysis of cooperation under the mobility of labour further. The policy authorities of some countries are no longer independent. The case of the monetary union of the European Union is a typical example. Accordingly, this chapter investigates which of the two regimes—inter-government monetary cooperation between two independent monetary authorities or centralisation of monetary policies by a single monetary authority under a monetary union—is advantageous. For this purpose, I assume two cases: one where a two-country economy is not subject to shocks and another where it is subject to supply or demand shocks.

I show that centralisation of monetary policies under a monetary union is likely to bring about higher utility for the monetary authority when the two-country economy is subject to shocks.

This suggests that in actual economies, which are interdependent on account of labour migration and are liable to be affected by shocks, centralisation of the monetary policies under a monetary union appears to be preferable to inter-government monetary cooperation between the two independent monetary authorities.

The analyses in the first part enables us to draw inferences on how we should deal with accepted foreign workers and how we should conduct macroeconomic policies under the mobility of labour when attempting to increase the welfare of labour sending and receiving countries. In particular, international migration should be facilitated and the higher degree of policy cooperation among agents is preferable.

The second three chapters conduct analyses, observing the economic system microscopically. I attempt to find how the welfare of the labour sending country is related to remittances by solving the optimisation problem with constraints. I also consider how the country receiving remittances can make it more optimal as an economic system when family ties are strong due to altruism.

One of the main reasons to migrate to and work in a foreign country is to send money to family members left behind in the migrants' home countries. This is because it is difficult for the migrants to find jobs in their home countries and, even if employment at home is possible, wages are not sufficient to support the family.

Remittances are a main recourse for labour sending countries to obtain funds from overseas, and they might help raise the welfare of the labour sending country.

However, to send remittances, migrants are often requested to pay a large sending fee. Moreover, to receive remittances, the migrants' families have to pay a receiving fee. It is often argued that these fees should be lowered to raise the amount of remittances. However, fees are determined by private financial institutions, and the government cannot manipulate them directly.

Chapter 4 considers how we can increase migrants' remittances to the family, given the amount of sending and receiving fees, or in other words, without affecting the interests of agents involved. To solve this problem, I assume that the migrant is altruistic towards his family members in the home country and the family members are likewise altruistic towards the migrant. This situation is more likely than that in previous studies where the migrant is assumed to be only altruistic towards his family members and the opposite does not hold.

Contrary to intuition, I derive that remittances become larger by *increasing* the receiving fee whereas they become larger by reducing the sending fee. I also derive that, by transferring the sending fee from the migrant to the household, remittances become larger than those without such a transfer.

These results suggest that remittances do not necessarily decrease with fees and that by utilising the transfer we can make the amount of remittances larger even if we cannot manipulate the sending and receiving fees.

Whether a labour sending and remittance receiving country can attain development and growth depends not only on the amount of remittances but also on how they are expended. In the case where remittances are spent on consumption, even if the amount is large, the country may not experience development and growth. Conversely, in the case where remittances are spent on investment, even if the amount is small, the country may develop and grow.

For those reasons, we must pay attention to how remittances are spent as well as to how much money is sent back. I infer that altruism has positive effects on the amount of remittances, but it might also have a certain effect on how they are spent.

Chapter 5 focuses on the role of altruism in sending and spending remittances. In particular, this chapter attempts to clarify how altruism affects the amount of remittances sent by the migrant and their disposition made by the family in the home country.

I find that the migrant sends a larger amount of remittances when he feels more altruistic toward his family, while the migrant may send nothing if he feels less altruistic. I also find that the family is likely to consume rather than invest remittances if they are highly altruistic toward the migrant.

These results partially explain why countries receiving large remittances do not necessarily make large investments, and suggest that altruism among family members does not automatically raise the welfare of the labour sending and remittance receiving country through remittances.

Chapters 4 and 5 assume a priori that one or some of the family members have already migrated or are certain to migrate. However, in general, even if the family members are altruistic toward each other, whether one or some of the family members migrate to a foreign country will be determined in the process of utility maximisation. It cannot be assumed a priori that one or some of the family members are always in a foreign country to provide labour.

Chapter 6 treats the migration decision as an outcome of utility maximisation. In particular, by solving the maximisation problem I examine both the effects of altruism on the amount of remittances sent by the migrant and on the migration decisions made by the potential migrant. In doing so, how altruism affects remittances that the family in the home country will actually receive (i.e., expected remittances) will be clarified.

I find that if migration does not incur any costs, the potential migrant always migrates, and altruism increases expected remittances monotonically, which are equal to remittances in this case. However, if migration incurs costs, the potential migrant does not necessarily migrate, and the potential migrant with a higher degree of altruism is less likely to migrate. As a result, given the migration costs, it is possible that altruism decreases expected remittances.

These results suggest that altruism does not increase expected remittances monotonically.

The analyses in the second part of the thesis reveal the strong association of remittances with altruism. We draw an inference that under altruism among family members remittances do not necessarily lead to the improvement of the labour sending country's welfare. The government of the labour sending country should implement policies that increase the amount of remittances and encourage people to spend them for the productive purposes in order to make the labour sending country more optimal as an economic system. The government should also promote migration by carrying out the policies that lower the migration costs.

This thesis concentrates on the theoretical analyses utilising static models with no long-lasting impacts of migration on the economy. The model should be tested empirically. The static model should be extended to the dynamic one so that migration has both short-tern and long-lasting effects.