

# Remittances and Household Consumption Behaviour: Findings in the Case of Fiji

Rukmani Gounder,  
School of Economics and Finance  
Massey University, Palmerston North,  
New Zealand

2016 Pacific Update Conference  
*Inclusive Growth for Enhanced Resilience*  
University of the South Pacific, Suva, Fiji  
July 18-19, 2016

# Introduction

- Remittance is an important source of income to finance the recipient households' livelihoods.
- By increasing income of the recipient households', remittances contribute to individuals' welfare from a range of consumption durable and non-durable goods, food, housing, education, health, small-medium scale entrepreneurial development, savings & poverty reduction.
- These expenditures allow the households to improve their standard of living, earn higher income as well play a larger role in the community development.

# Analysis of this study

- Examine the remittances and household consumption behaviour relationship using Fiji's household income and expenditure survey 2008/2009 dataset.
- Classifying the household expenditure categories by food, housing, durable-non-durable goods, education and health, the analysis is further disaggregated by ethnicity and urban-rural areas.
- With remittances larger flow in the case of Fiji and its potential role in social and economic development, the findings identify the specific categories that household utilises that source of income and demonstrate the effectiveness of remittances.

# Remittance Theories

## Theories of Remittances: Why Do People Remit?

- Pure Altruism
- Pure Self-Interest
- Implicit Family Agreement
- Portfolio Management Decisions
- Remittances are important to:
  - **Families** involved (income for the household)
  - **Companies** that transmit them (profit)
  - **Nations** that send them (political aspects)
  - **Nations** that receive them (development)
- Importance of remittances to developing countries: foreign exchange, savings, investment, household consumption, poverty reduction, etc.

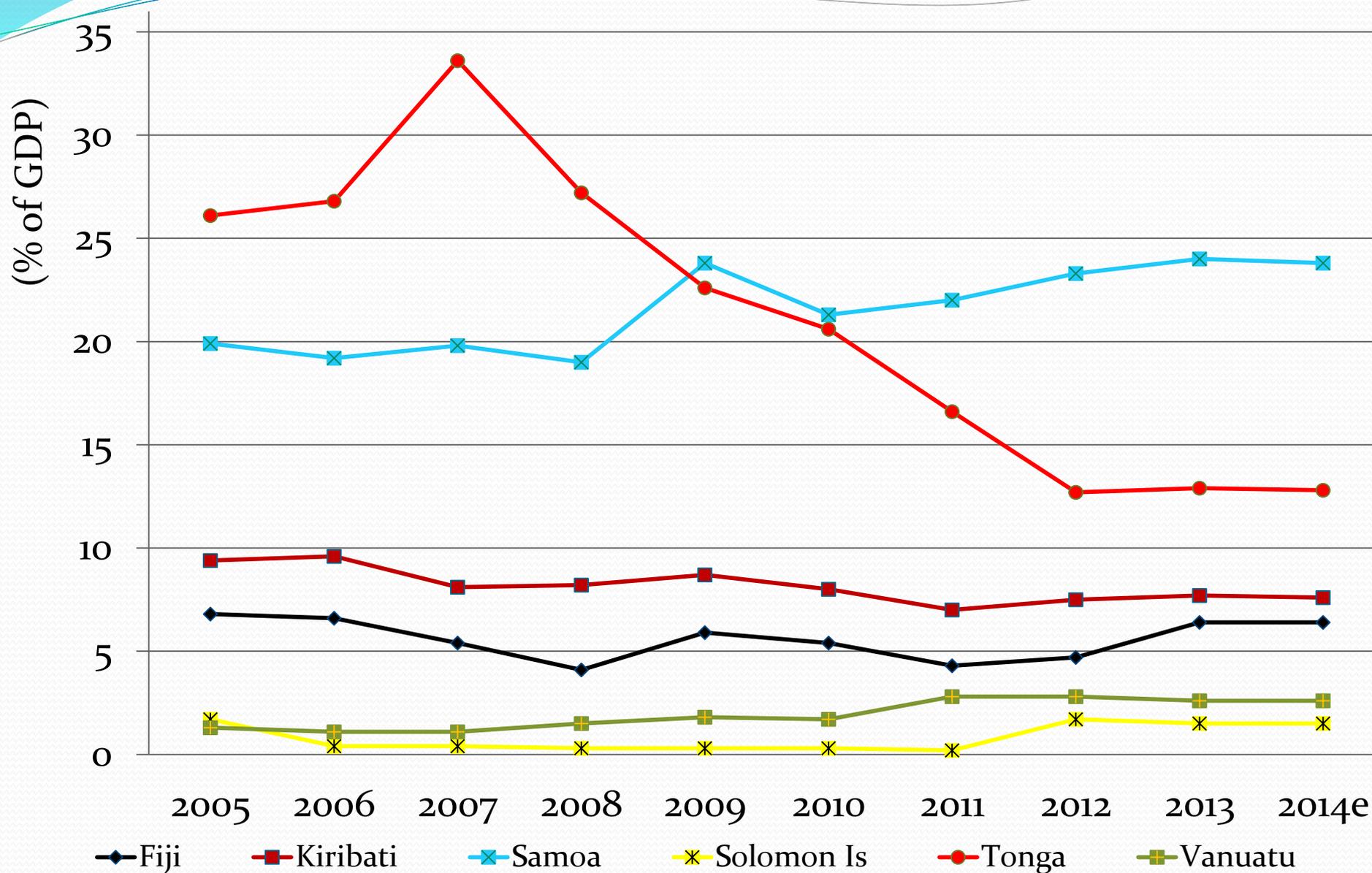
# Literature Review

- Remittances serve various purposes for the households basic needs; serve as payments for services rendered to migrants; as an insurance scheme from income shocks; provide returns on the investments in human capital; and enable migrants to invest in inheritable assets (Stark, 1984).
- Households use remittances to facilitate the accumulation of land and agricultural capitals, contributing directly to the household income and indirectly to crop production and diversification in Pakistani rural farm (Adams, 1996; de Brauw, Taylor, & Rozelle, 2001).
- In rural Mexico, the remittance-receiving households tend to invest more in farm assets. Similarly, for Guatemala, the households devote remittances more on the durable goods, housing, education and health, and less on food and other nondurable goods (Adams, 2005).
- In the Latin American countries remittances have been utilised for food, durable and nondurable goods, housing, health, education, purchase of land, and improving farming performance and output (Acosta, Fajnzylber, & Lopez, 2008).
- Brown and Jimenez (2008) that the impact of migration and remittances on poverty reduction are statistically significant in both Fiji and Tonga, although it has a much stronger effect in Tonga than in Fiji.

# The South Pacific Labour Movement

- The Cook Islands, Fiji, Niue, Samoa, Tonga and Tokelau have a sizeable migration flow to Australia, New Zealand and the United States.
- What is noteworthy for the Pacific islands migration is the movement of the educated population.
  - In 2000, eight of the top 10 countries with the highest rate of tertiary educated emigrants in East Asia & the Pacific region are:
    - Samoa at 75.4%, Tonga 75.2%, Fiji 62.2%, Marshall Islands 39.4%, the Federated States of Micronesia 37.8%, Papua New Guinea 28.5%, Palau 26.1%, and Kiribati at 23.1% (World Bank, 2011).

Figure 1 Remittance to GDP Share, Selected Pacific Islands, 2005 to 2014



Source: World Bank, *World Development Indicators*.

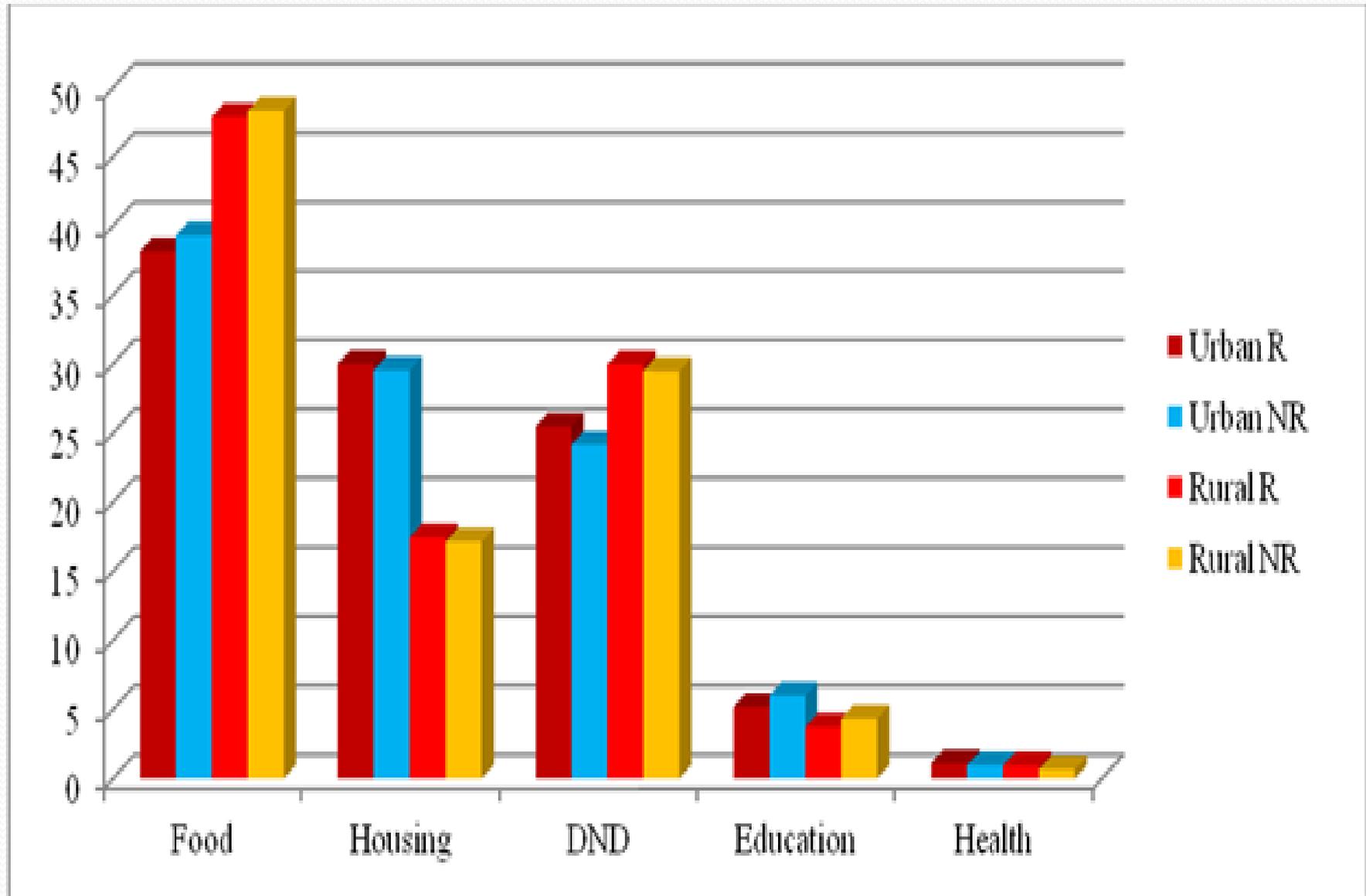
**Table 1 Average Household Expenditure Shares by Categories:  
Remittance and Non-Remittance Households, 2008-09**

<b>Consumption Expenditure</b>	<b>Total Households (%)</b>	<b>Remittance Recipients (%)</b>	<b>Non-remittance Recipients (%)</b>
<b>Food</b>	28.94	28.76	29.34
<b>Housing</b>	23.04	23.57	22.81
<b>DND</b>	27.28	27.8	27.1
<b>Health</b>	0.88	1.03	0.82
<b>Education</b>	4.9	5.1	4.44
<b>No. of Households</b>	3573	1104	2469

Source: Estimation based on the 2008-09 HIES survey.

Note: DND is Durable and non-durable goods.

**Figure 1 Fiji's Household Expenditure Patterns by Regions:  
Remittance and Non-Remittance Households, 2008-09**



## Effects of Remittances on Household Consumption Patterns

Specification is classified by the household head and household characteristics as follows:

$$w_{ij} = \alpha_j + \beta_{1j} \ln(E_i) + \beta_{2j} X_i + \beta_{3j} Z_i + \beta_{4j} R_i + u_{ij}$$

$W_{ij}$  is the ratio of expenditure on good  $j$  to total household expenditure in household  $i$ ,

$E_i$  is log of total household expenditure; and further disaggregated into expenditures for Food, Durable and non-durable goods, Housing, Education, and Health,

$Z_i$  is a vector of the characteristics of the household  $i$ ,

$R_i$  represents the remittance receiving households,

$\mu$  is a random error term that captures unobserved characteristics, and

$i$  is  $1, \dots, N$ , households.

# Methodology

- The remittances-household consumption nexus is estimated using the seemingly unrelated regression (SUR) technique (see Shonkwiler & Yen, 1999).
- SUR technique is useful to estimate the marginal effects of remittances and other variables on the household expenditures for each category of consumable goods and services, i.e., food, housing, durable and non-durable goods, education and health.
- The data utilised in the analysis are based on the Household Income and Expenditure Survey (HIES) 2008/2009 for 3,573 households.

**Table 1 Average Household Expenditure Shares by Categories: Remittance and Non-Remittance Households, 2008-09**

<b>Consumption Expenditure</b>	<b>Total Households (%)</b>	<b>Remittance Recipients (%)</b>	<b>Non-remittance Recipients (%)</b>
<b>Food</b>	28.94	28.76	29.34
<b>Housing</b>	23.04	23.57	22.81
<b>Durable-Non Durable Goods</b>	27.28	27.8	27.10
<b>Health</b>	0.88	1.03	0.82
<b>Education</b>	4.90	5.10	4.44
<b>No. of Households</b>	3,573	1,104	2,469

Categories	Food	Housing	Durables & Nondurables	Education	Health
<b>Total Household</b>	0.001	0.005**	-0.014***	0.007***	0.0002
	(0.28)	(2.10)	(-3.99)	(3.59)	(0.28)
<b>Fijian</b>	-0.003	0.009***	-0.01**	0.005**	-0.0004
	(-0.81)	(2.62)	(-2.33)	(1.98)	(-0.98)
<b>Indo-Fijian</b>	-0.004	0.009*	-0.019***	0.014***	0.001
	(-0.64)	(1.70)	(-3.29)	(4.06)	(0.08)
	<b>Results By Urban Region</b>				
<b>Total Urban</b>	-0.06	0.009**	-0.012**	0.008***	-0.001
	(-1.27)	(2.35)	(-2.41)	(2.59)	(-0.12)
<b>Fijian</b>	-0.004	0.01*	-0.006	0.001	0.001
	(-0.69)	(1.89)	(-0.88)	(0.1)	(0.01)
<b>Indo-Fijian</b>	-0.015**	0.009	-0.013*	0.019***	-0.001
	(-2.03)	(1.49)	(-1.82)	(4.22)	(-0.04)
	<b>Results By Rural Region</b>				
<b>Total Rural</b>	0.005	0.003	-0.013***	0.005**	0.001
	(1.07)	(0.91)	(-2.8)	(2.15)	(0.49)
<b>Fijian</b>	-0.001	0.002	-0.007	0.006**	-0.001**
	(-0.09)	(0.49)	(-1.19)	(2.21)	(-2.07)
<b>Indo-Fijian</b>	0.019*	-0.004	-0.026***	0.008*	0.002
	(1.85)	(-0.65)	(-2.71)	(1.69)	(0.79)

Notes: \*\*\*, \*\*, and \* are significant levels at 1, 5 and 10% significant levels, respectively; t-ratios are in parentheses.

# Conclusion

- Results highlight the potential influential role of remittances in the household expenditure behaviour.
  - On the contrary to the belief that remittances are mostly used for food consumption, the results for Fiji suggest that remittance income has alternative uses in the households.
- Remittances are especially targeted toward consumption of education and housing.
- Expenditure patterns differ between urban and rural areas and also between Fijian and Indo-Fijian households.
  - Urban areas: Indo-Fijian households use remittance income substantially on education related expenditure while remittances received by Fijian households are used for housing.
  - Rural areas: Fijian and Indo-Fijian households use the remittance income mostly on education expenditure.

# Implications

- Findings support the view that recipient households tend to put remittance income for the productive use, as well as the Engle's law that food expenditures are an increasing function of income and family size, but that food budget share decreases as household income increases in Fiji.
- Remittances assist households to improve or maintain their livelihoods and hence implicate reducing poverty levels in these recipient households.
- Policies should be aimed at supporting improved agricultural production, skills and vocational trainings, development of rural infrastructure, market integration, and the creation of rural employment opportunities.
- Government's role for institutional support to financial services and institutions will be vital to enhance the use of remittances.
  - To increase the volume of remittance transfers through formal channels it is crucial to reduce transaction costs,
  - Introduce communication technology and link the remittance recipient households to other financial schemes such as savings, credit (credit for productive investments and housing) and insurance (agricultural production insurance) to improve economic and social development.



**Wīnaka**