



Remittances as a Safety Net in Jamaica

Diether W. Beuermann
Inderjit Ruprah
Ricardo E. Sierra

Inter-American
Development Bank

Country Department
Caribbean Group

POLICY BRIEF

No. IDB-PB-235

October 2014

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2014

Cataloging-in-Publication data provided by the
Inter-American Development Bank
Felipe Herrera Library

Beuermann, Diether W.

Remittances as a safety net in Jamaica / Diether W. Beuermann, Inder Jit Ruprah, Ricardo E. Sierra.

p. cm. — (IDB Policy Brief ; 235)

Includes bibliographic references.

1. Emigrant remittances—Jamaica. 2. Health insurance—Economic aspects—Jamaica. I. Ruprah, Inder J. II. Sierra Cacho, Ricardo Enrique. III. Inter-American Development Bank. Country Department Caribbean Group. IV. Title. V. Series.

IDB-PB-235

<http://www.iadb.org>

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Diether W. Beuermann: dietherbe@iadb.org; Inder Jit Ruprah: inderr@iadb.org

Ricardo Sierra: rsierra@iadb.org

Abstract

This policy brief answers three main questions for the Jamaican economy: (a) Do remittances act as a safety net during negative health shocks? (b) Are remittances subject to moral hazard by receivers? (c) How does formal health insurance interact with remittances as a safety net during adverse health episodes? Evidence suggests that remittances offer full protection against decreased consumption during health shocks, that they are not subject to moral hazard by receivers and that they are particularly relevant among beneficiaries of publicly provided health insurance. These results indicate that relatively higher emphasis could be placed on fostering policies aimed at reducing transaction costs for sending and receiving remittances over policies aiming at increasing senders' control over the use of remittances; and on identifying beneficiaries of public health insurance schemes (without access to private health insurance) who do not receive remittances as a particularly vulnerable population where targeting of complementary safety nets could be directed.

JEL classifications: F24, I13, O15

Keywords: consumption smoothing, Jamaica, remittances, health shocks

1. Introduction and Summary

Remittances represent a significant source of foreign exchange for the Jamaican economy. In 2013, remittances accounted for 14.5 percent of Jamaica's GDP, and the country ranked 16th among all countries in the world in terms of significance of remittances for the economy.¹ Therefore, from a policymaker's perspective, assessing to what extent and through what mechanisms remittances are useful for development is highly relevant.

Accordingly, in this Policy Brief, we assess whether remittances act as a social insurance mechanism.² We do so by focusing on whether and how remittances help to smooth consumption during negative health shocks suffered at the household level. In particular, we shed light on the following questions:

- Do remittances act as a safety net during negative health shocks?
- Are remittances subject to moral hazard by receivers?
- How does formal health insurance interact with remittances as a safety net during adverse health episodes?

Existing studies assessing the role of remittances as social insurance have mainly focused on weather related events (such as hurricanes or abnormal rainfall).³ While these adverse events are beyond human control, they are closer to systemic shocks. Therefore, not all adverse effects could be expected to be diversified away. For example, after a hurricane hits, even if all foregone local income were replaced by remittances, damages would have likely affected agricultural productivity and local infrastructure (including ports, roads, and airports). So, at least in the short term, local markets would be in short supply, prices may increase and not everyone (even if average lost income was totally replaced by remittances) would be able to fully smooth consumption.

By contrast, health shocks (accidents and illnesses) suffered by household members are idiosyncratic in the sense that they are suffered by individual households and do not carry geographic-wide damages like hurricanes. Therefore, if remittances replace household's forgone income, consumption could be totally smoothed. As a result, health shocks serve better to assess the relevance and significance of remittances as a social insurance mechanism in Jamaica. We

¹ Development Prospects Group, World Bank. It should be noted, however, that these estimates are most probably failing to pick up a significant portion of remittances that are not recorded.

² We focus the analysis on cash remittances. Therefore, the reception of in-kind remittances is not analyzed.

³ See Clarke and Wallsten (2004), Yang and Choi (2007), Yang (2008), and Combes and Ebeke (2011).

perform this analysis exploiting health shocks and consumption reported in the 2010 Survey of Living Conditions.

Our findings suggest that health shocks adversely affect total household expenditures by an average of 19 percent.⁴ However, remittances totally offset these adverse effects, evidencing that in the light of idiosyncratic shocks, remittances serve as a social insurance mechanism that offers full protection. We also find that moral hazard concerns are low as remittances are not used to fully smooth consumption of goods that are potentially undesirable for senders (such as alcohol). Furthermore, we find that remittances are not relevant as an insurance mechanism against health shocks in the presence of formal private health insurance. By contrast, remittances constitute a powerful form of insurance in the absence of health insurance and when recipients are enrolled in publicly provided health insurance.

In terms of policy implications, our results indicate that higher emphasis should be placed on the following:

- Fostering policies that aim to reduce transaction costs for sending and receiving remittances.
- Identifying persons without access to private health insurance and who do not receive remittances as a particularly vulnerable population where targeting of complementary safety nets could be directed.

Next, we elaborate on these findings and the respective policy implications.

2. Findings

2.1 Remittances and Consumption Smoothing

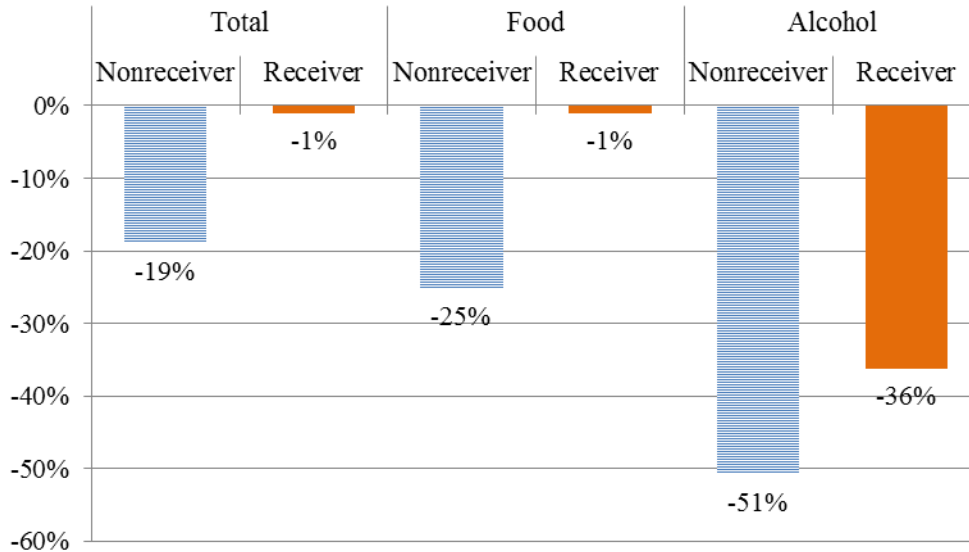
If remittances serve as a safety net during adverse health episodes, we expect that households in which some member suffered a health shock and that do not receive remittances would be negatively impacted. By contrast, households that receive remittances should be either impacted less seriously (for a case in which remittances offer partial insurance) or not impacted at all (for a case in which remittances offer full insurance).

The first bar of Figure 1 shows that households where no member reported having received remittances during the previous year (labeled *nonreceiver*) dropped their total consumption by 19 percent within the month in which the health shock was suffered. By

⁴ This refers to the entire income distribution of the population that have not received remittances within the year preceding the survey.

contrast, the average remittance receiver household was unaffected (orange bar).⁵ The same pattern, although with more serious effects equivalent to a 25 percent drop within the category of nonreceivers, is observed for food consumption.

Figure 1. Remittances, Health Shocks, and Consumption



The evidence presented strongly suggests that remittances serve as a mechanism for social insurance that completely offsets adverse effects on consumption during health shocks. Therefore, we conclude that on average remittances offer full insurance on consumption during adverse health events.

2.2 Moral Hazard?

One area of interest is the issue of migrant control over remittances (Yang, 2011). When remittances are sent to receivers, senders often have little control over their utilization.

⁵ All effects reported in this Policy Brief were obtained from econometric models that control for district level time invariant unobservable factors, and a vector of control variables that include age, gender, civil status, employment status, and health insurance status of the household head. Controls also include indicators for whether the household is PATH beneficiary, ownership status of the dwelling, and for the presence of piped water, sewerage, electricity, land phone, desktop, laptop, refrigerator, washing machine, dryer, car, electric water heater, solar water heater, water tank, and generator. The estimated error terms were clustered at the district level in all estimations. For methodological details, see Beuermann, Ruprah, and Sierra (2014).

Therefore, moral hazard could arise if receivers use remittances to finance consumption in items that are undesirable for senders. To test whether moral hazard exists in the advent of health shocks, we consider the consumption of a potentially undesirable good for senders—alcohol.

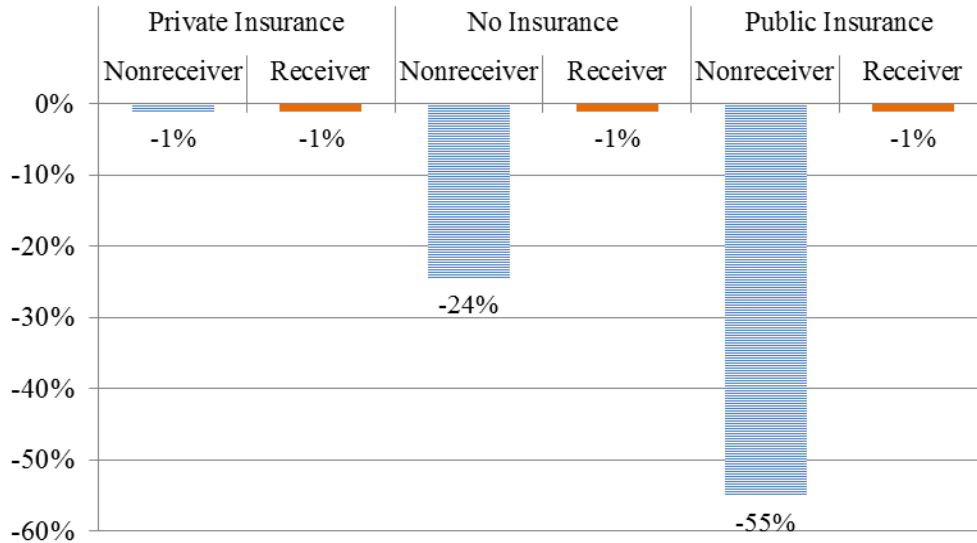
Figure 1 also shows that alcohol consumption dropped by 51 percent as a result of an adverse health shock in the absence of remittances. Similarly, when remittances existed, alcohol consumption also dropped by 36 percent. Therefore, alcohol consumption is partially offset by remittances but it still drops significantly. We interpret this as evidence of weak moral hazard as only one third of decreased alcohol consumption observed without the insurance provided by remittances was offset within remittance receivers.

2.3 The Role of Formal Insurance

When thinking about remittances as a mechanism through which social insurance could be achieved during adverse health shocks, we would expect that the relevance of such an informal form of insurance would decrease in the presence of formal health insurance. To test this claim, we split our sample in three: households with private health insurance, without health insurance, and with publicly provided health insurance.

If private health insurance is a sufficient safety net toward consumption smoothing during health shocks, we should observe that, contingent upon having private insurance, both remittances receivers and nonreceivers should be unaffected by adverse health episodes. In Figure 2, the two left bars corroborate the previous hypotheses as neither group has varied total consumption in the advent of health shocks.

Figure 2. Remittances, Health Insurance, and Total Consumption



Results for households without health insurance are also shown in Figure 2. Households with neither health insurance nor remittances experience a negative impact equivalent to 24 percent in total consumption as a result of a health shock. In contrast, households without health insurance but that receive remittances are unaffected by health shocks. This evidences that the social insurance provided by remittances completely insulates households against decreased consumption as a result of health shocks in the absence of formal health insurance.

Last, we show that households with public insurance and without remittances are highly vulnerable to health shocks. Total consumption for these households is reduced by 55 percent in the advent of a health shock. However, for households with remittances, consumption remains unchanged after a health shock. This suggests that remittances also offset adverse consumption effects for those households that have public health insurance.

Considering that on April 1, 2008, user fees in hospitals and clinics all across Jamaica were eliminated, the condition of either not having health insurance at all or that of being beneficiary of a publicly provided health insurance both yield an equivalent situation regarding health coverage. However, accessibility to privately provided health insurance facilitates better and more efficient access to health care in terms of lower waiting periods and availability of medicines.

3. Policy Implications

Our first set of findings suggests that health shocks adversely affect total household consumption by an average of 19 percent. However, remittances totally offset these adverse effects, evidencing that in light of idiosyncratic shocks, remittances serve as a social insurance mechanism that offers full protection. We also find that moral hazard concerns are low as remittances are mainly used to smooth consumption of presumably desirable goods for senders like food and are not used to fully smooth consumption of potentially less desirable goods for senders such as alcohol.

In terms of policymaking, previous findings imply that investments directed toward allowing higher control to senders over the utilization of remittances among receivers, while relevant, might not be a first priority for Jamaica. However, investments in mechanisms and technologies with the potential to decrease transactions costs of sending and receiving remittances would be more relevant in terms of increasing the role of remittances as an insurance mechanism. So far, one example of technologies that has proven its effectiveness in strengthening the role of remittances as an insurance mechanism is the ability to send money through SMS messages (Jack and Suri 2014). Full implementation of such innovations in both countries from which remittances originate and receiving agencies within Jamaica has the potential to enhance the insurance role of remittances, thereby increasing welfare.

A second set of findings indicates that remittances are not relevant as an insurance mechanism against health shocks in the presence of formal private health insurance. By contrast, remittances constitute a powerful form of insurance in the absence of health insurance and when recipients are enrolled in publicly provided health insurance. The latter identifies a particularly vulnerable population: households without access to private health insurance who do not receive remittances.

In terms of policymaking, it is relevant to explore mechanisms directed toward identifying households without private health insurance who do not receive remittances. Such identification could rely on observable and verifiable data sources such as administrative databases of private insurance companies that could be merged with recent census (2011) microdata using individuals' names and dates of births. This would allow the identification of households without access to private health insurance and that report not having emigrating members and not being remittances receivers. An objective identification of this particularly

vulnerable population could serve as an effective targeting mechanism toward focusing complementary safety nets that aim to insulate consumption of disadvantaged households during adverse health shocks.

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