

Cyclical Properties of Workers' Remittances

Serdar Sayan

Dept. of Economics
Bilkent University
06800 Bilkent, Ankara
Turkey

and

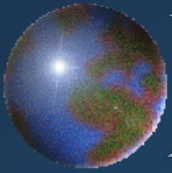
Dept. of AED Econ.
Ohio State University
Columbus, OH 43210
USA

Material in this presentation relies heavily on
the forthcoming IMF WP by the author

“Business Cycles and Workers’ Remittances:

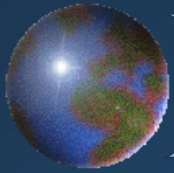
How do Migrant Workers Respond to Cyclical Movements of GDP at Home?”

which has also been used as a background paper for GEP 2006



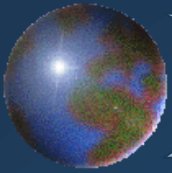
Motivation

- ❖ In the literature, remittances are often argued to have a tendency to move countercyclically with the national income (GDP) in recipient countries.
- ❖ Thus, remittances are expected to move in the opposite direction with the business cycle, increasing whenever there is a stagnation or economic crisis in the home country of migrant workers, and falling whenever home country economies do well, with the economic growth picking up.
- ❖ Natural: Migrant workers are likely to increase their support to family members during the down-cycles of economic activity back home to help them compensate for lost family income due to unemployment or other crisis-induced reasons.



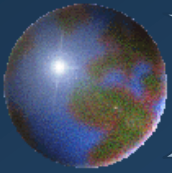
Motivation

- ❖ If this is indeed the case, remittances would serve as a macroeconomic stabilizer that helps smooth out large fluctuations in the national income observed over different phases of the business cycle.
- ❖ The existing literature shows that the decision to remit is a complex phenomenon involving other factors than the motivation to help finance current consumption spending of family members and relatives back home.
- ❖ If different variables driving the remittance behavior are differently influenced by the state of economic activity over the business cycle, it is conceivable that remittances may be procyclical or even acyclical with the output in some of the recipient countries.



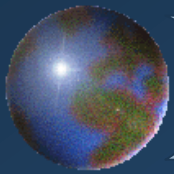
Motivation

- ❖ In the case of procyclicality with home country business cycles, remittances may act as a destabilizing force since this would increase the capacity of swings in remittance flows to produce additional fluctuations in output or current account balances, with serious macroeconomic effects.
- ❖ Furthermore, any parallel reductions in remittances during the times of sharp output drops would deepen the crises even further, contributing to economic instability and lowering the credibility of recipient countries at times of greater need for external funding.



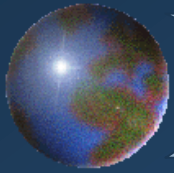
Motivation

- ❖ Cyclical characteristics of remittances also have potentially significant and opposite implications for poverty, depending upon whether households that receive remittances are mostly poor.
- ❖ It is therefore important to know whether remittances respond positively or negatively to movements of GDP over the business cycle for different countries.



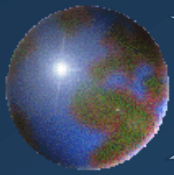
Scope

- ❖ Here, cyclical properties of remittances are considered for a group of 12 low-income (LI) and lower-middle income (LMI) countries.
- ❖ Business cycles are defined as the deviations of real GDP from their respective trends as in Lucas (1977) and Kydland and Prescott (1990).
- ❖ Thus, cyclical characteristics of remittances are examined here by looking at the co-movements between deviations from trend of real remittances and those of real GDP.

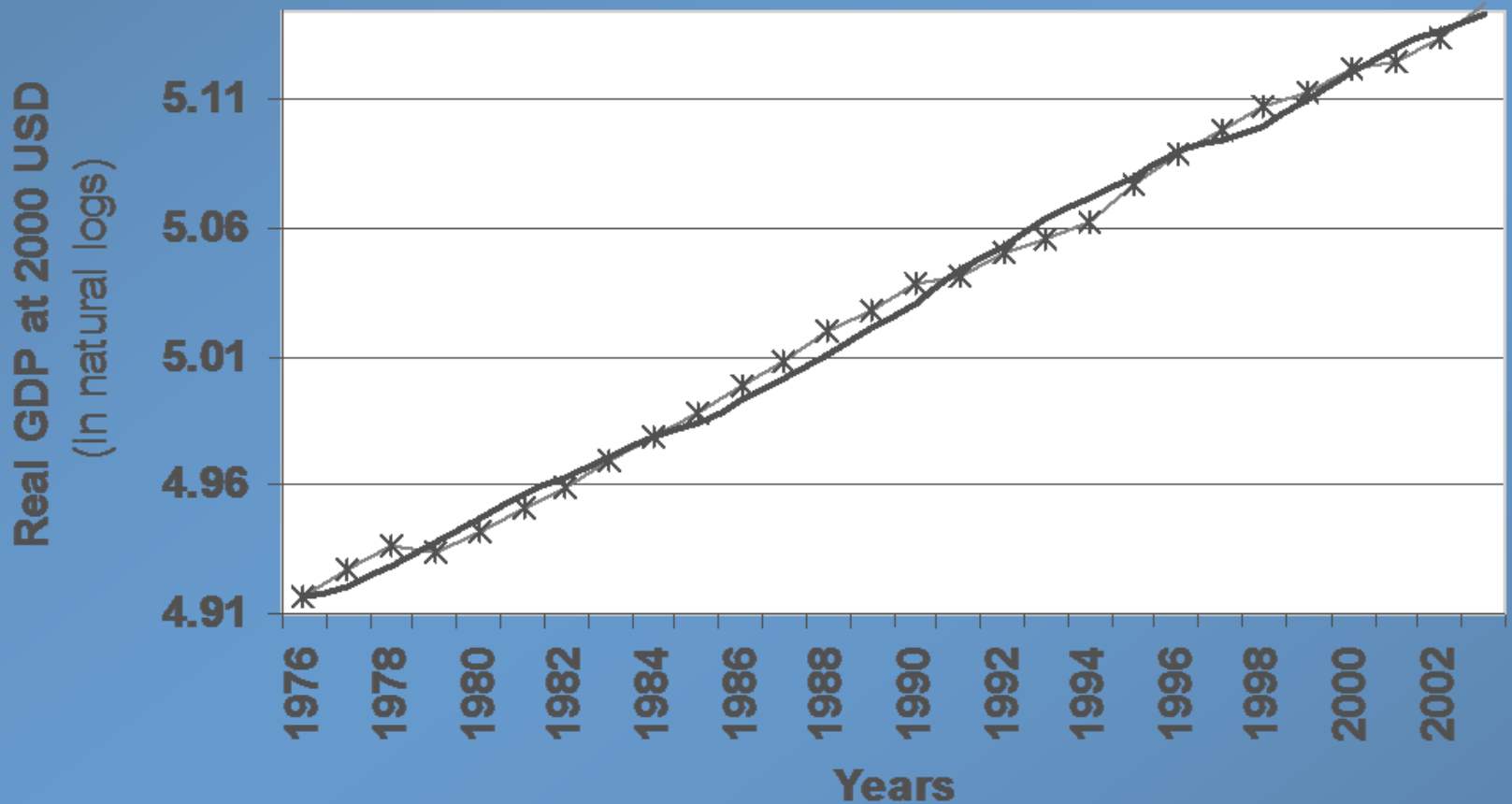


Scope

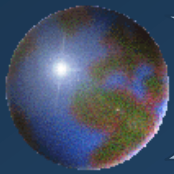
- ❖ The analysis here separately treats 12 countries in the sample individually and as a group.
- ❖ LI countries in the sample are Bangladesh (BGD), India (IND), Côte d'Ivoire (CIV), Lesotho (LSO), Pakistan (PAK) and Senegal (SEN)
- ❖ LMI countries are Algeria (DZA), Dominican Republic (DOM), Jamaica (JAM), Jordan (JOR), Morocco (MAR) and Turkey (TUR).



Total Real GDP of the Countries in the Sample and Its Trend

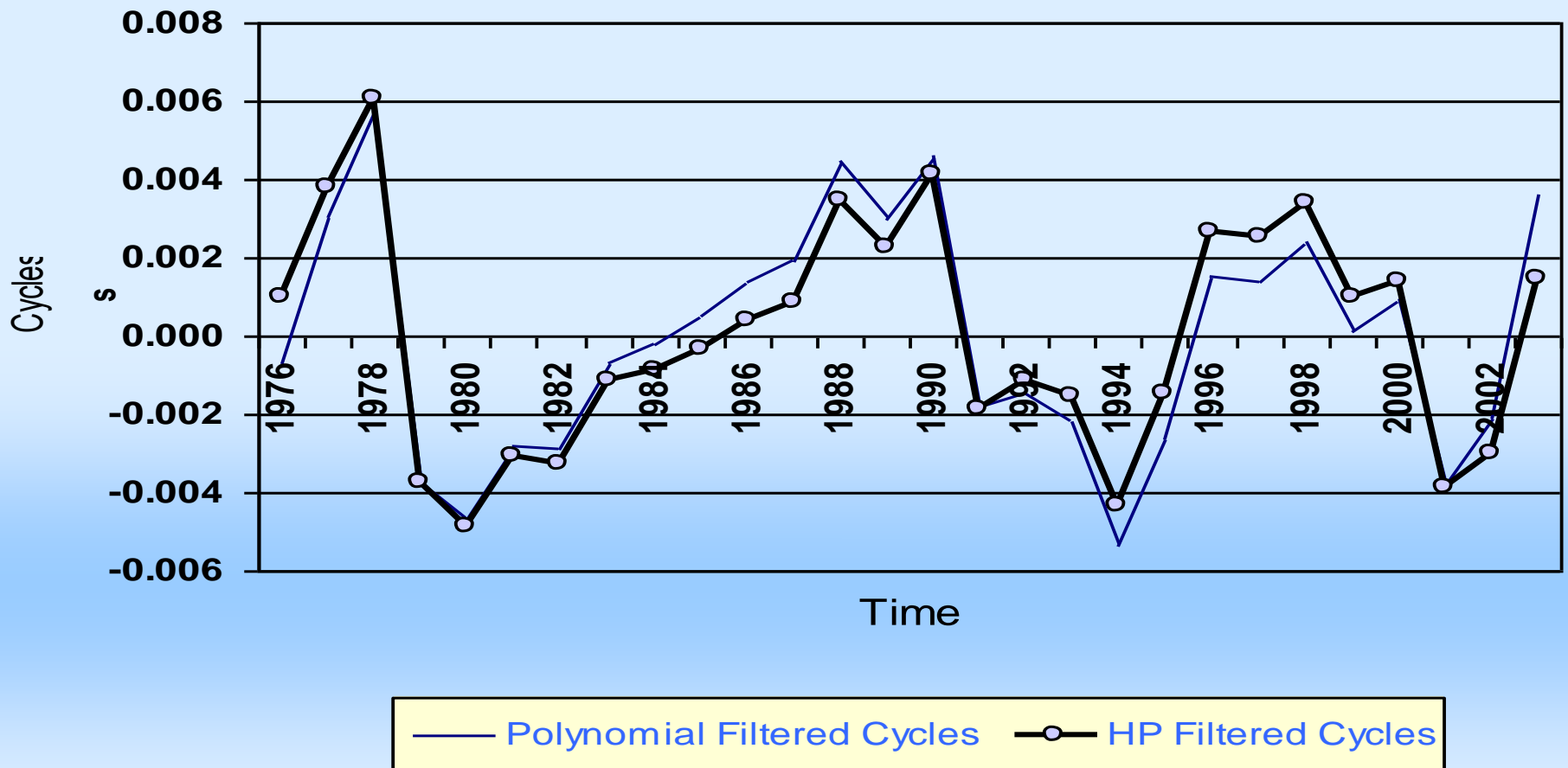


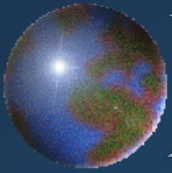
—*— Real GDP of the Group (Weighted Total) — Trend of the Real (Group) GDP



Business Cycles in the Group of Countries in the Sample

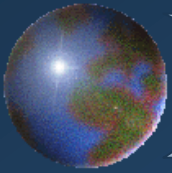
Comparison of Output Cycles
Extracted through Different Filters





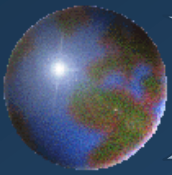
Results

- ❖ The results obtained provide evidence that remittances received by the group as a whole are countercyclical and lead the aggregate GDP cycle by one period.
- ❖ In other words, savings remitted to the home countries of workers abroad tend to increase (decrease) after a period of stagnation/crisis (growth/boom) at home, as far as the entire group is concerned.



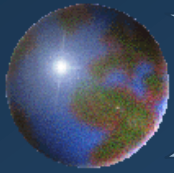
Results

- ❖ This behavioral pattern, however, is not common across countries within the group implying that panel evidence for a group of countries may conceal important country-specific characteristics.
- ❖ When looked at individually, remittance flows into some of the countries within the group are countercyclical whereas others are procyclical or acyclical.



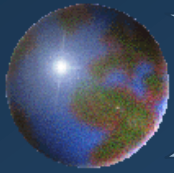
Results

- ✦ Of the countries where strong countercyclicality is found, Bangladesh's remittances receipts are synchronous with the business cycle, whereas India's receipts lag it by a year.
- ✦ Similarly, of the countries with a strong procyclical relationship between remittances and output, receipts by Jordan are synchronous with real GDP in this country, whereas remittances received by Morocco lag the output cycle by a year.
- ✦ Put differently, migrants from Bangladesh and India increase their transfers during times of economic hardship at home (implying a strong consumption smoothing motive), whereas migrants from Jordan and Morocco increase their transfers during good times at home (implying a stronger investment motive/higher risk aversion).
- ✦ In terms of the response time, Bangladeshi and Jordanese migrants respond to the state of economic activity in their home countries immediately (though in the opposite direction), whereas Indian and Moroccan migrants respond with a time lag (though in the opposite direction again).



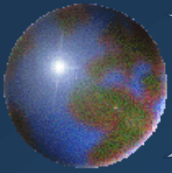
Results

- ⊕ Again, by country-specific results, remittances sent home by migrant workers from Algeria, Jamaica, Lesotho, Pakistan and Turkey appear to be countercyclical but the degree of cyclicity is not strong enough to state this with confidence based on statistical significance of correlations estimated using annual data.
- ⊕ Likewise, the seemingly procyclical relationship between remittances sent by migrants from the remaining countries (Dominican Republic, Ivory Coast and Senegal) and respective outputs fails to pass statistical significance tests requiring that real remittances received by these countries be classified as acyclical.



Results

- ❖ The results reported here may be improved when higher frequency (such as quarterly) data is used instead of annual data.
- ❖ In the case of Turkey, for example, the analysis based on annual data here signals an absence of any synchronous or asynchronous correlation between real GDP and remittances.
- ❖ Yet, earlier works (such as Sayan, 2004 and 2005) employing quarterly data on remittances from the Turkish workers in Germany indicate that there is a strong synchronous procyclicality between remittance receipts and output over the Turkish business cycles.



Results

- ❖ Sayan (2005) further indicates that the countercyclical relationship between remittances that Turkey receives and the Turkish output may have turned into procyclicality over time implying that the passage of time may change cyclical properties of remittances.
- ❖ There is evidence that up to the second quarter of 1994 when the first major economic/financial crisis in the aftermath of the 1980s hit Turkey, Turkish workers in Germany tended to increase remittances shortly after output drops in the Turkish economy, but this pattern changed after the crisis.

