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IS "ECONOMIC FREEDOM" A SIGNIFICANT DETERMINANT OF MIGRANT REMITTANCES? EMPIRICAL EVIDENCE FROM ASIAN LABOR EXPORTING COUNTRIES

Key Words

*Asia; Cointegration;
Economic Freedom;
Remittances.*

Abstract

This paper is an empirical investigation of how the inflows of remittances in a sample of eight Asian economies are determined by a number of macroeconomic factors, some of which are a reflection of the effect of their institutional set-ups. The main hypotheses tested here evolve around the extent to which the flows of remittances are influenced by three variables measuring the degrees of fiscal, monetary and financial freedoms. The evidence suggests overwhelmingly that higher economic freedom in this sense exerts a strong significant impact on the inflows of remittances. The model specified for the purpose of this investigation is estimated using a panel error correction technique. Prior to the estimation, the data is subjected to a battery of panel unit root and cointegration tests. The purpose for the extensive testing is to assess the properties of the data with respect to unit roots, and to identify whether there is a long-run equilibrium relationship among the variables of the model.

Introduction

It is well known that remittances have been the lifeblood of a large number of economies for decades. Indeed, they have provided receiving economies with solid boosters as they

usually represent a significant source of external financing that end-up shaping-up their processes of economic development. They do so in a variety of ways as they contribute to alleviat-

ing poverty and improving income distribution in the receiving countries. This is in addition to the most apparent influence of remittances in connection to balances of payments, as they commonly alleviate foreign exchange bottlenecks in recipient countries. From a policy perspective, remittances have an interesting advantage over other forms of inflows of external finances. Indeed, they typically come with no strings attached and are not tied to specific uses, such as the case of foreign debts. Recipient countries would not be subjected to political pressure in relation to inflow of remittances, such it is the case of foreign aid (Ghosh 2006; Gammeltoft, 2002; Seragel-Din *et al.*, 1981). Unlike any other financial inflows, they are not subject to any services costs such as any interest payments or any other debt services. Overall, the evidence in literature on this topic is overwhelmingly in support of the hypothesis that flows of remittances have all along been critically important for those economies on the receiving end.

Besides the consequences of remittances on receiving countries, the relevant literature also provides substantial evidence on another dimension to this issue, the determinants of remittances. This line of research is primarily concerned with accounting for variations in the flows of remittances. That is, what factors determine the amount of remittances a country receives? On this

question, the literature is divided into two broad categories, one of which comprises studies relying on microeconomic approaches and others exploring the issue using macroeconomic modeling frameworks. At the micro analytic level, the literature is concerned with the determinants of individual behavior. Empirical work conducted in this regard is generally based on sample surveys. In this framework, the most common hypothesized motivations for remittance transfers are either pure altruism (wellbeing of the family at the origin), or pure self interest (self future wellbeing of the migrant), or a complex blend of motivations of altruism and self interest (mutually beneficial arrangements between the migrant and the family). One of the most cited studies in this theme is the work by Lucas and Stark (1985), in which the main premise is that decisions about remittances ought to be interpreted at the household level. The second approach typically uses macroeconomic factors in explaining the flows of remittances. The list of studies with this type of focus includes Swamy (1981), Lianos (1997), El-Sakka and McNabb (1999), Campbell (2003), Bouhga - Hagbe (2004), Roache and Gradzka (2007), Vargas-Silva (2008), and Yang (2008). In this type of investigation, the principal research question usually evolves on how remittances are impacted by variables such those reflect-

ing domestic GDP per capita, exchange rates, interest rate differentials (home and foreign), domestic price level, etc.

While the number of empirical studies on this subject matter has been relatively large, in particular in recent years, the literature remains seriously deficient in relation to the role of institutions and the impact of institutional issues in the home country on the inflow of remittances. As a matter of fact, a number of Economists, perhaps the more famous of whom are Douglas North and Amartya Sen emphasize the significant roles of cultural and institutional dimensions as determinants of economic growth and well-being.⁽¹⁾ In relation to the flow of remittances, the institutional dimension is potentially an important one. Indeed, the institutional set-up in any given economy conditions inevitably the extent of economic freedom enjoyed by its agents. The latter determines the ease by which individuals may freely engage in economic transactions. Given that the process by which migrants send money involves financial transactions, they are always subject to a range of procedures and regulations. As such, factors such as the extent of market competitiveness, the complexities of the regulatory environment, and government practices

in relation to production and distribution, should all be important considerations for agents contemplating sending money home. Yet, there has not been a significant flow of empirical studies investigating the impacts of such factors on remittances.

This paper proposes to fill-in this gap in the literature by conducting an empirical investigation of the effect of the institutional set-up on remittances. More precisely, the paper attempts to test the significance of three measures of economic freedom in the receiving country (as a reflection of the institutional dimension), for the inflow of remittances. The main hypotheses to be tested in this investigation evolve around the extent to which the flow of remittances is influenced by three key variables "fiscal freedom", "monetary freedom", and "financial freedom". These measures are based on data from the index of Economic Freedom published jointly by the Heritage Foundation and the Wall Street Journal. The essence of the economic freedom as defined by these organizations is "the absence of government coercion or constraint on the production, distribution, or consumption of goods and services beyond the extent necessary for citizens to protect and maintain liberty itself".⁽²⁾ It is

(1) See for example North (2000 and 2005) and Sen (1999 and 2003).

(2) See the "2006 Index of Economic Freedom".

logical to expect the context of freedom in this sense, and in particular with respect to the fiscal, monetary and financial dimensions, to be inextricably associated with remittance flows.

The empirical exercise is conducted in this paper using panel data from eight Asian labor exporting countries for the period 1995-2005. In terms of the methodology, it is proposed to build a framework allowing for the estimation of the impact of a number of determinants of remittances, the main of which are the three freedom measures outlined above. The model is designed to be an aggregation of different uses of remittances in the country of origin in light of different determinants of each use. The estimation is conducted using a panel error correction technique. The investigation uses panel data, along with examining its time series properties within a panel unit root and co-integration framework so as to remove the possibility of spurious relationships as quite common in time series models.⁽³⁾

The remainder of this paper is structured as follows. The second section offers brief background information of the flow of remittances in the countries under study. The third section details the formulation of the

model and the measurement of the variables. The fourth section is devoted to relevant tests, the estimation of the model, and a brief summary of the results. The final section offers some concluding remarks.

Background Information on Migrant Remittances to the Asian Countries Understudy:

For the purpose of this investigation, it has been decided to use a panel data for eight labor exporting Asian countries covering 1995-2005. These are: Bangladesh, China, India, Indonesia, Pakistan, the Philippines, Sri Lanka, and Thailand. As well known, this sample comprises some of the major players in the global emigration process. For most of these countries, remittances have been very significant to the well-being of their economies, in particular Bangladesh, India, Pakistan and the Philippines. As indicated in table (1), remittances to these countries reached during the period 1995-2005 about \$ 368.5 billion through official channels. India (the world's major labor exporter) had been the main recipient of remittances with about \$ 154 billion. The Philippines was in a distant second position with roughly \$ 90 billion. While it has not had a historically notable record with respect to attracting remittances, China had

(3) For more details, see for example Pedroni (1999).

Table 1
Remittances of Labor in a Selection of Asian Countries (in \$ million)

Year	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Bangladesh	1202	1345	1527	1606	1807	1968	2105	2858	3192	3584	4252	25446
China	350	1672	4589	344	530	758	1209	2353	4625	6641	8832	31903
India	6223	8766	10331	9479	11124	12890	14285	15754	21727	19736	23499	153814
Indonesia	651	796	725	958	1109	1190	1046	1259	1489	1866	1865	12954
Pakistan	1712	1284	1707	1172	996	1075	1461	3554	3964	3945	4280	25151
Philippines	5360	4875	6799	5130	6693	6924	8760	9735	10239	11468	13561	89544
Sri Lanka	801	843	934	1013	1064	1154	1170	1296	1423	1574	1628	12901
Thailand	1695	1806	1658	1424	1460	1697	1252	1380	1607	1622	1187	16790
Total	17994	21387	28270	21126	24783	27656	31288	38189	48266	50436	59104	368499

Source: UNCTAD (2006) "Handbook of Statistics 2006".

recorded impressive growth in this category towards the end of the period. Most certainly, this recent trend was helped by the increasingly improved business environment in the country.

To put things into perspective, table (2) shows the remittances in these countries relative to a number of key macroeconomic variables, (population, gross domestic product, imports, exports, official development assistance, and foreign direct investment). One of the more revealing observations in the table is that remittances represented roughly 10 percent of the GDP in the Philippines, with a level of remittances per capita of about \$ 100. Remittances could finance more than a quarter of all imports of Bangladesh and India, and about 20% of imports in the Philippines, Sri Lanka and Pakistan. Indeed, they generated during this

period inflows that exceeded 20 percent of export revenues in five out of the eight countries in the sample. They accounted for an average of about 30% of total exports in both Bangladesh and India, and about a quarter of exports in the Philippines, Sri Lanka and Pakistan. On another level, the ratios of remittances to official development assistance (ODA) and foreign direct investment (FDI) had been exceptionally high in Bangladesh, India, Pakistan, the Philippines, Sri Lanka, and Thailand.

In light of these indicators, it is clear that remittances of Asian emigrants in this sample had been substantial to countries of origin, in particular as a source of foreign exchange. The remainder of the paper has the principal objective to determine the nature of the relationships between remittances in these countries

Table 2
Remittances as Proportions to Some Key Indicator
(Averages for the 1995-2005 Period)

Country	Remittances Per Capita (\$)	Remittances /GDP (%)	Remittances /Imports (%)	Remittances /Exports (%)	Remittances /ODA (%)	Remittances /FDI (%)
Bangladesh	16.8	4.3	26.8	36.4	191.0	7114.6
China	2.2	0.2	13.3	11.5	43.3	5.1
India	13.8	2.7	26.3	31.1	1116.7	359.4
Indonesia	5.5	0.7	3	2	64.3	24.5
Pakistan	15.6	2.8	19.4	22.4	188.4	340.8
Philippines	99.6	9.6	21.7	24.4	1368.4	1002.6
Sri Lanka	57.9	6.9	20.1	23.6	231.0	646.5
Thailand	25.8	1.1	2.8	2.5	307.1	65.4

Source: Proportions developed using data from the UNCTAD "Handbook of Statistics", and the IMF "International Financial Statistics".

and a set of variables, including those measuring different forms of economic freedom, to assess how significant these variables were in explaining remittance flows into these countries.

Formulation of the Model:

A model is designed to capture both the country and time effects. The proposed specification of the equation to estimate the determinants of remittances takes the following form:

$$R_{it} = \alpha_0 + \alpha_1 y_{it} + \alpha_2 (r_w - r_i)_t + \alpha_3 (\theta - \theta_r)_{it} + \alpha_4 fisc_{it} + \alpha_5 monet_{it} + \alpha_6 finan_{it} + \alpha_7 R_{it-1} + \varepsilon_{it}; \quad (1)$$

Where,

R_{it} : is per capita remittance at the receiving country at time t .

y_{it} : is per capita GDP of the remittances receiving country at time t .

$(r_w - r_i)_t$: is the difference between the world's interest rate and the interest rate at the receiving country and the at time t . As a benchmark, the one year dollar "LIBOR" rate compiled by the British Bankers Association is taken as the measure of the world's interest rate.

$(\theta - \theta_r)_{it}$: is a measure of the extent of the exchange rate misalignment at the receiving country at time t . This variable is measured as the difference between the nominal exchange rate and the "long-run" equilibrium of exchange rate of the domestic currency reflecting the purchasing power parity condition, (on the basis of the ratio of the domestic price level to the foreign one).

$fisc_{it}$: is the extent of "fiscal freedom" at the receiving country at time t , measured on the basis of the index of economic freedom published jointly by the Heritage Foundation and the Wall Street Journal.

$monet_{it}$: is the extent of "monetary freedom" at the receiving country at time t , measured on the basis of the index of economic freedom published jointly by the Heritage Foundation and the Wall Street Journal.

$finan_{it}$: is the extent of "financial freedom" at the receiving country at time t , measured on the basis of the index of economic freedom published jointly by the Heritage Foundation and the Wall Street Journal.

R_{it-1} : is the lagged per capita remittance at the receiving country.

Aside from the variables measuring different forms of economic freedom, all explanatory variables in equation (1) are fairly standard. The rationale for the inclusion of the per capita GDP as a hypothesized determinant of the flow of remittance into the receiving country is consistent with the literature. Although there is no overwhelming consensus on its likely effect; given that some studies suggest a positive relationship between domestic per capita GDP and remittances (e.g. Swamy (1981) and Hysenbegasi and Pozo (2002)), more

evidence points in the direction of a negative relationship between (e.g. Faini (1994) and Lianos (1997)). The premise for the negative relationship is the proposition that the more depressed the economy is the more it will attract remittances, which is consistent with the altruism motivation for remitting. The coefficient of the variable controlling for the interest rate differential is expected to be negative, i.e., the greater the difference between the interest rate abroad and the interest rate at home, the less the flow of remittances to the countries of origin. The inclusion of this variable is intended to capture any portfolio effect that might arise as a result of the differential between financial returns at the host country and domestically. The extent of the exchange rate misalignment is also used in this model as an explanatory variable as remittances are typically made either through official channels or through unofficial ones. This is an important issue, particularly in countries adopting pegged exchange rate regimes. Under such arrangements, informal markets are typically very much in demand. As migrant workers have the opportunity to exchange their savings of foreign exchange either through official or unofficial channels, their choices are likely to depend on exchange rate differentials in the two

corresponding markets. It is expected that wider differentials between the nominal exchange rate and its real value would provide an incentive to use informal foreign exchange markets. It is also noted that equation (1) takes account of a lagged dependent variable. The motivation behind the addition of this variable is to track-down any prevailing policy inconsistencies, and to control for any information inertia (or lack of), with a potential effect on the attainment of desired remittance levels by emigrant workers. That is to assess whether changes in policies affecting remittances, with migrant workers not having prior knowledge of them, have been in place.

In addition to macroeconomic variables commonly used in the relevant literature, the model specified in equation (1) stipulates that three economic freedom variables are to affect the flow of remittances to the country of origin. These variables are included to reflect the institutional dimension in the remittance receiving country, as it has a direct impact on the extent of economic freedom enjoyed by its agents. The first of these variables is what measures the extent of fiscal freedom. The measure used in this investigation is the one developed by the Heritage Foundation and the Wall Street Journal, which accounts for the

tax burden in the home country. More specifically, it is a measure of the confiscation of wealth and income via taxation. The measure is based on the proportion of tax revenue to GDP. The fiscal freedom score is defined using an equation that defines higher freedom with lower taxes and tax rates. Common sense would suggest that an institutional framework that provides for lower tax burdens would affect the flow of remittances positively. That is, countries with minimal confiscation via taxation would be expected to attract more remittances, specifically if those remittances are intended for investment purposes.

The second variable is monetary freedom. It is a variable that is measured on the basis of the stability of prices in the economy and the extent of price controls in it. According to this measure, both inflation and price controls are considered as distortions of market activities. As such, price stability maintained along with market non-interference, are the bases for a higher monetary freedom. Accordingly, the specification of this model is implicitly suggesting that monetary policy along with a price control mechanism, thorough their combined effect on monetary freedom, are expected to have an impact on the flow of worker remittances. Intuition would suggest in this case a positive

effect on the flow of remittances of monetary freedom, brought-about by a sound monetary policy and no interference with the market mechanism.

Finally, the financial freedom variable is intended to capture the effect on remittances of the relative openness of the country's banking and financial systems. The premise is that State ownership of banks and other financial institutions is considered a burden. As such, as the level of independence of banks and other financial institutions from government controls increases, financial freedom increases. The rationale for the inclusion of this variable is the insight that burdensome financial institution regulations in the home country, as typical in a non-free banking and financial sector environment, would likely have a negative effect on the inflow of remittances.

Tests, Estimation of the Model, and Main Results:

Prior to the panel error correction estimation of the model, panel unit root tests are employed to the data. In addition, using modern panel co-integration techniques, co-integration tests are performed with the primary objective to detect any long-run equilibrium relationships among these variables.

Panel Unit Root Tests:

Panel unit root testing as an approach has several advantages compared to unit root testing for single equation time series. Indeed, panel unit root tests are more powerful, as more information can be extracted from the use of combined time series and cross-section data. In light of the diversity in panel unit root testing methodologies, this paper uses a number of tests as classified into two broad categories: i) those tests that assume a unit root for each time series of the panel, with autoregressive processes differing across the cross-sections in the panel, (Im, Pesaran and Shin W-stat, panel ADF-Fisher Chi-square, and panel PP-Fisher Chi-square); and ii) those tests that assume a common unit root, with the same autoregressive processes across the cross-sections in the panel, (Levin, Lin & Chu, Breitung t-stat, and Hadri Z-stat). Table (3) summarizes the results of these six panel unit root tests of all variables in the proposed model.

The results indicate that the dependent variable is found to be generally non-stationary in its levels, (with the exception of Hadri Z-stat test). This result is valid assuming a trend or no trend. Upon taking the first difference, the variable becomes stationary across the board. The same

Table 3
Panel Unit Root Test Results

Variable/test	coefficient	coefficient	coefficient	coefficient
R_{it}	Levels No trend	First difference With trend	Levels No trend	First difference With trend
Im, Pesaran and Shin W-stat	1.643	-0.358	-4.647**	-2.153*
ADF - Fisher Chi-square	7.022	16.540	53.741**	44.579**
PP - Fisher Chi-square	8.036	17.113	74.627**	83.532**
Levin, Lin & Chu	-1.359	-4.182**	-8.296**	-9.628**
Breitung t-stat	0.230	-1.084	-4.434**	-3.838**
Hadri Z-stat	4.343 [∧]	3.211**	4.185**	19.515**
y_{it}				
Im, Pesaran and Shin W-stat	0.462	0.834	-2.176*	-2.087*
ADF - Fisher Chi-square	15.327	10.339	30.459*	40.607**
PP - Fisher Chi-square	8.528	3.994	31.905**	55.841**
Levin, Lin & Chu	-0.511	-1.647	-4.854**	-7.847**
Breitung t-stat	-0.185	0.162	-2.987**	-3.568**
Hadri Z-stat	3.256**	5.474**	3.256**	17.878**
$(r_w - r_i)_t$				
Im, Pesaran and Shin W-stat	-0.919	-0.612	-1.369	-1.111
ADF - Fisher Chi-square	20.766	19.017	24.550	30.184*
PP - Fisher Chi-square	43.238**	22.517**	62.267**	56.756**
Levin, Lin & Chu	-0.819	-3.993	-2.710**	-6.827**
Breitung t-stat	-0.416	0.140	-3.380**	-2.815**
Hadri Z-stat	3.790**	11.230**	3.772**	21.160**
$(\theta - \theta_r)_{it}$				
Im, Pesaran and Shin W-stat	-0.079	-1.914	-5.745	-3.083
ADF - Fisher Chi-square	19.818	34.738	59.488	52.776
PP - Fisher Chi-square	19.378	48.714	53.964	46.962
Levin, Lin & Chu	-0.892	-4.955	-9.820	-16.971
Breitung t-stat	0.283	0.383	0.164	-1.277
Hadri Z-stat	4.365	5.136	0.627	22.355
$fisc_{it}$				
Im, Pesaran and Shin W-stat	-3.628**	1.380**	-6.464**	-1.975*
ADF - Fisher Chi-square	40.083**	1.380**	71.148**	42.443**
PP - Fisher Chi-square	55.637**	1.380**	118.604**	100.468**
Levin, Lin & Chu	-11.740**	-4.527**	-11.740**	-6.880**
Breitung t-stat	-3.603**	0.021**	-3.603**	-4.025**
Hadri Z-stat	1.380	3.773	2.838**	12.484**

Cont. Table 3
Panel Unit Root Test Results

Variable/test	coefficient	coefficient	coefficient	coefficient
<i>monet_{it}</i>				
Im, Pesaran and Shin W-stat	-0.146	-0.822	-4.870**	-1.512
ADF - Fisher Chi-square	19.214	21.299	54.378**	33.698**
PP - Fisher Chi-square	19.121	37.950*	70.356**	53.184**
Levin, Lin & Chu	-1.977*	-4.527*	-7.388**	-6.880**
Breitung t-stat	-1.011	0.021	-3.791**	-4.025**
Hadri Z-stat	3.802**	3.773**	0.825	12.484
<i>finan_{it}</i>				
Im, Pesaran and Shin W-stat	1.187	-0.803	-3.086	-0.877
ADF - Fisher Chi-square	3.796	13.804	28.234	16.578
PP - Fisher Chi-square	3.446	11.052	36.395	24.974
Levin, Lin & Chu	-0.318	-3.382	-3.505	-5.002
Breitung t-stat	-1.037	-0.111	-3.554	-3.764
Hadri Z-stat	5.292	5.026	1.325	6.411

** significant at the 1% level, * significant at the 5% level.

could be said about per capita GDP. Interest rate difference is also found to be generally non stationary in levels either by adding a general trend or not, (with the exception of PP-Fisher Chi Square and Hadri Z-stat tests). Taking the first difference, with the exception of Im, Pesaran and Shin W-stat tests, interest rate difference is found to be stationary either with or without the introduction of a general trend. In relation to the degree of exchange rate misalignment of the local currency, it is found to be non-stationary across the board. As for the variable measuring the extent of financial freedom, tests indicate overwhelmingly that it is stationary in its

levels, either with or without a trend (except with Hadri Z-stat), and likewise for its first difference. Results about the variable measuring monetary freedom are found to be mixed, particularly with the introduction of a general trend; with its first difference being stationary all along, (except with Hadri Z-stat). Finally, the results in relation to the variable measuring financial freedom indicate non-stationary status across the board. Overall, the results of different tests of unit roots in the majority of cases indicate that series are non-stationary in levels, but stationary in their first differences. This seems to indicate that they are integrated of degree 1 (i.e., I(1)).

Panel Co-integration Tests:

Following Pedroni (1999), this investigation performs seven tests of panel co-integration, four of which test for the co-integration of the panel (panel v-stat, panel rho-stat, panel PP-stat, and panel ADF-stat). The three remaining are group mean co-integration tests, (group rho-stat, group PP-stat, and group ADF-stat).

Table (4) displays the results of these testing procedures.

With the exception of the panel v-stat test, all other results suggest evidence in favor of rejecting the null hypothesis of no panel co-integration. This finding supports the proposition that there exists a long-run relationship between the variables of the

model included in the panel, (with or without a trend in the series).

Estimation Using the Panel Error Correction Method and the Main Results:

In light of the earlier findings, the model can be estimated using the panel error correction method. Results of this estimation are presented in table (5).

Note that the error correction coefficient in this case points to the presence of a mechanism to correct the error, which means that there is a tendency within the system to return to a long-run relationship in the aftermath of any short-term imbalances. As expected, the results yield high significance for the error correction factor, with a negative sign. In relation

Table 4
Panel Co-integration Test Results

Test	Without General Trend	With General Trend
Panel Co-integration Tests		
Panel v-stat	-0.95449	-1.35549
Panel rho-stat	3.89795**	3.05394**
Panel pp-stat	-3.63521**	-3.49327**
Panel ADF-stat	-2.34285*	-2.59564**
Group Mean Co-integration Tests		
Group rho-stat	5.05345**	4.32296**
Group pp-stat	-3.32731**	-4.12128**
Group ADF-stat	-2.43059*	-3.20360**

** significant at the 1% level, * significant at the 5% level.

Table 5
Results of the Estimation Using the Panel Error Correction Method

Variable	Estimated Coefficient	t-statistic	P-value
Constant	6.142	7.274	[.000]
ε_{it-1}	-0.442	-6.420	[.000]
y_{iht}	-0.889	-9.435	[.000]
$(r_w - r_i)_t$	-0.013	-1.649	[.099]
$(\theta - \theta_r)_{it}$	-0.239	-9.252	[.000]
$fisc_{it}$	1.071	3.135	[.002]
$monet_{it}$	0.275	3.031	[.002]
$finan_{it}$	0.983	3.727	[.000]
R_{it-1}	0.260	1.861	[.063]

Diagnostic statistics:

SSE = .665629

SSR = 27.9129 R-squared = .7897

Husman test H0:RE vs. FE (39.86) [.000]

to the core determinants of worker remittances, none of the results of the estimation of the model using this method is counter-intuitive. Indeed, the sign on the coefficient of per capita GDP is negative, with high significance. That is, there is evidence to suggest an inverse and significant relationship between per capita GDP in the country of origin and the per capita remittance inflows. This should not come as surprise as one important motivation of remittance inflows to countries of origin is usually altruism, i.e., to finance the basic needs of immediate family members of mi-

grants. In regards to the interest rate differential between the world's rate and the rate at the receiving country, the evidence suggests an inverse and significant effect on the flow of remittances. This result supports the pre-supposition that decisions by migrant workers to remit are guided by an optimality behavior in relation to their portfolios of financial assets. As for the variable measuring the extent of the exchange rate misalignment at the receiving country, the results yield a negative sign with high significance. This finding implicitly indicates that, if the extent of the exchange rate

misalignment in the home country is sizeable, migrant workers would seek to convert their savings away from those markets that provide official nominal exchange rates, which would stimulate activities in parallel informal or black markets.

Perhaps the more important results in the context of this investigation are those that relate to the hypothesized effects of the three freedom variables on the flow of remittances. Starting with fiscal freedom, the results indicate a positive sign with high significance. This is in support of the presumption that the intensity of the tax burden on individuals and companies is indeed a disincentive to remit. These results suggest implicitly that countries could improve their record in terms of remittance attraction by reforming their institutional framework in ways that translate into lower tax burdens. The effect of monetary freedom is analogous in terms of the sign of the coefficient and the significance. This is to suggest that remittances are attracted to countries with a track record of low levels of inflation in settings not involving government intervention with price mechanisms. Finally, and with respect to financial freedom, the results once again yield a positive coefficient with high significance. This result is in line the hypothesis that the flow of remittances to a country is sensitive to the

degree of development and openness of its banking system and financial institutions.

Concluding Remarks:

This paper is an empirical investigation of how the inflows of remittances in a sample of eight Asian economies are determined by a number of macroeconomic factors, some of which are a reflection of the effect of their institutional set-ups. The main hypotheses tested in this investigation evolve around the extent to which the flows of remittances are influenced by three variables measuring the degrees of fiscal, monetary and financial freedoms. The evidence suggests overwhelmingly that higher economic freedom in this sense exerts a strong significant impact on the inflows of remittances. To the best of the knowledge of the authors, no other investigation has assessed the impact of institutional factors, and more precisely economic freedom on the flows of remittances. This paper is not claiming that the role of institutions in this investigation has been totally and adequately captured in relation to the determination of remittance flows across countries. But this investigation has at least the merit of calling attention to the important role of some institutional features as determinants of flows of remittances. Other more wide-ranging factors capturing

both the institutional and cultural features of countries (such as issues of property rights, corruption, transparency, regulatory bodies, etc), and

how they matter for the determination of the terms of reference for remitting, should be investigated more vigorously in future research.

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الملخص

الحرية الاقتصادية وتحويلات المهاجرين: دراسة تطبيقية عن البلدان الآسيوية المصدرة للعمالة

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تتناول هذه الورقة بالدرس العوامل التي تحدد تدفقات تحويلات المهاجرين المالية إلى بلدانهم الأصلية، استناداً إلى بيانات تتعلق بعينة من ثماني دول آسيوية. وتنقسم هذه العوامل إلى فئتين، أولاً ما يعكس أهم المتغيرات الاقتصادية الكلية، وثانياً ما يؤثر على طبيعة المؤسسات والتطور المؤسسي المقيس من خلال التطور في هامش الحرية الاقتصادية في الدول المصدرة للعمالة. ويتم اختبار مجموعة من الفرضيات حول التطور المؤسسي بقياس ثلاثة متغيرات للحرية الاقتصادية («الحرية المالية»، و«الحرية النقدية»، و«الحرية التمويلية»)، ومدى تأثيرها على تدفقات التحويلات المالية. وتشير الأدلة إشارة واضحة إلى أن هامش الحرية الاقتصادية بهذا المنظور يؤثر تأثيراً إيجابياً على تدفقات التحويلات إلى البلدان المصدرة للعمالة.

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