LUXEMBOURG SCHOOL OF FINANCE

Master of Science in Banking & Finance : Thesis

Impact of regulation, de-regulation and technology in the EU payments industry on the cost of remittances towards East African Countries (Kenya, Rwanda, Tanzania, Uganda).

Submitted by:

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Abstract

We propose to analyze the impact of regulation, de-regulation and technology in the EU payment systems industry on remittances, focusing on five sub-Saharan African receiving countries. Disruption , de-regulation and IT innovation that has been undergoing in the payment industry in Europe led to a significant decrease in remittances cost. And yet, corridors that include Sub-Saharan African countries continue to face the highest cost of sending money. Nonetheless, within that region, countries that has adopted digital receiving channels and increased financial inclusion, seem to be better off. Beyond the historical mistrust that the remittances sector arouses, we strive to highlight that (i) a low level of financial inclusion in the receiving countries, (ii) de-risking behavior of banks and regulators in sending countries and (iii) disproportionate and cumbersome, one would say inadequate, Anti Money Laundering (AML/CFT/KYC) regulations, are the main factors to explain why the trend of cost of remittances is not going down further when it comes to cross-border payments towards Sub-Saharan Africa.

Contents

Introduction

Increasing migration flows during the last twenty years has naturally created a bigger market for the remittances industry. Irrespective of what the media would tend to portray on migration dynamics, there are much more migrants who move from a developing country to another developing country, than those who move from developing countries to the richer northern countries. Though economic migration seems to be a common denominator. Migration dynamics and remittances are closely related even if remittances practitioners would want to save time on migration discussions and debates during remittances related forums.

Personal and professional background are in essence the main source of inspiration and motivation for choosing a paper on remittances and cross-border payments. Born in Rwanda, grown up in Belgium and with a working experience in Luxembourg, we followed a typical migration pattern as many people born in a Sub-Saharan African country would have done. Remittances are part of life of every migrant and, as it may happen, can be the only link with the native country as we experienced while running a small Money Transfer company based in Rwanda.

It is against this background therefore, and as an observer living in the *two worlds* as many migrants can be, that we strive to keep abreast with the regulatory changes and technological innovations taking place in the remittances sector. The Payment Service Directives in Europe (PSD 1 in 2007 and PSD 2 in 2018) aimed at increasing innovation and market competition among non-Bank Payment Service Providers (PSPs). In this paper we analyze if the trends and figures we observe in the remittances industry since the Payment Directives came into force, are up to the expectations and infatuations they had raised at that time.

1. Literature review

We use different literature to gather qualitative and quantitative data for the analysis around the research question. Facts and figures on migration and remittances flows are mainly provided by the Global Knowledge Partnership on Migration and Development (KNOMAD, 2018), a global hub of knowledge and policy expertise, located within the World Bank and largely supported by Swiss funds. Publications and websites of other Multi-lateral organizations such as the IMF (International Monetary Fund, 2009) and UNDP (United Nations Development Programme, 2018) were used to gather information on international remittances, remittances costs dynamics, and specifying the Sustainable Development Goals (SDG's) and digital access as a way of increasing financial inclusion in Africa. Beck & Peria (2011) publication was instrumental in highlighting the determinants of remittances fees.

We posit that there is a correlation between remittances fees in the sending countries and financial inclusion in the receiving countries. The more digital receiving options the beneficiary will have, the less the sender will have to pay in remittance fees. Publications by Zins and Weill (2016) and a report from the IFC (2018) were key in emphasizing this relationship. European Union and European Commission websites were also consulted to extract the essence and rationale of the first and second Payment Service Directives. As far as the sending countries are concerned, we focused on fifteen European countries that were part of the E.U prior to 2004[1]. Our assumption being that countries that joined the E.U after 2004 do not have a migration background that would justify important remittance flows towards Sub-Sahara African receiving countries under scope[2]. Reports from the Inter-American Bank (M.Vasquez, 2017), IFC (2016) and the International Bank for reconstruction and Development (IBRD, 2015) were consulted to determine the impact of De-risking behavior on trade in general and remittances in particular.

[1] Germany, France, Italy, Belgium, Portugal, Luxembourg, Netherlands, Denmark, Irland, Austria, Finaland, Sweden, Greece, Spain, Finland

[2] Kenya, Rwanda, Tanzania, Uganda

2. Scope & Methodology

We intend to articulate the thesis around four main topics : the first topic will outline the migration dynamics in OECD countries, remittances historical background, remittances figures and cost trends as compared to the Sustainable Development Goals (SDGs). Remittances outflows data from KNOMAD website will be used to highlight the flows from the chosen EU countries. For the receiving countries, we have chosen to limit our study on four Sub-Sahara African countries member of the *Eat African Community* : Kenya, Tanzania, Rwanda and Uganda. Accurate and effective data collection on remittances data remain challenging especially when it comes to Africa, as informal channels such as friends and family carrying the money when travelling abroad, or the *compensation mechanism*[3] remain common practice. In this paper, we use data related to remittances that are accounted in the formal channels and gathered by the World Bank/KNOMAD. Whereas figures used by KNOMAD might encompass both transactions made through banks and Money Transfer Operators (MTO), this paper will focus on the impact of the regulatory environment on Money Transfer Operators, other than banks, in the chosen EU sending countries.

The second topic will deal with the rationale and essence of the Payment Service Directives 1 and 2 which came into force in 2007 for the former and 2018 for the latter. We will study the evolution of remittances costs from 2000 to 2017. An online survey will also be conducted on remittances operators in Europe to inquire on the current cost of sending funds from Belgium to the African receiving countries. Both the findings from the World Bank index and the online survey will be key in answering our research question.

The third topic will strive to identify payments institutions in the identified EU countries that are active in the remittances sector, by consulting the European Banking Authority Register. In so doing, we shall underline the removal of the Small Payment Institution status which enabled small operators (typically those with annual turnover under three millions euros) to operate within a more flexible and less cumbersome regulatory framework.

Global AML/KYC rules and the relevant regulations applicable in Europe will be outlined in the fourth section, as well as De-risking behavior which is increasingly adopted by banks towards Payment Service Providers involved in remittances activities. Based on the findings from the second topic, and insights from the Global Center on Cooperative Security (Durner & Shetret, 2015), we shall demonstrate that de-risking behavior from banks, largely due to a strict and restrictive interpretation of the AML/CFT/KYC regulations, causes, for small and specific corridors operators, to be driven off the market. A shrinking of the market players might therefore inevitably lead to more flows be diverted towards informal channels, and an increase of fees for authorized operators in the long run.

[3] Also known as the *Hawala system*

We shall conclude by giving a few recommendations on how a different structural approach of the remittances sector, with a more proportionate legal framework, can contribute to enhance the level playing field for new comers and ensure as well full compliance with AML/CFT/KYC regulations.

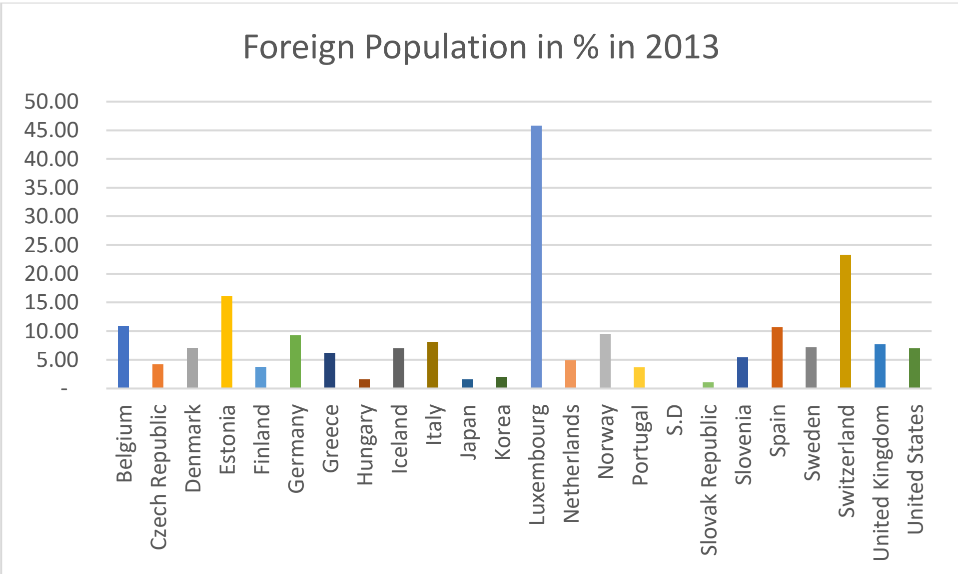
I. Migration and Remittances

1.1 Migration in OECD Countries : Overview

Migration is the main determinant and driver of remittances. Though many professionals in the remittance industry would prefer to spare migration talks off during seminars on remittances, we ought to emphasize the migration trends and facts in order to better understand the remittances dynamics.

The Global Knowledge Partnership on Migration and Development (KNOMAD), an initiative of the World Bank, indicates that 90% of the migrants move for economic reasons and there are currently 266 million international migrants around the world (including refugees) among whom 47% are women (World Bank, 2018).

In 2013, OECD countries had on average 9.03% of foreigners within their population. The proportion for EU countries within OECD was a bit higher at 9.24 %, with ranges from 1.1% in Slovak Republic for example, to 45.8 % in Luxembourg. It is equally important to mention the lack of figures as far as France is concerned. That shall even put higher the average proportion of population as per mentioned earlier on.



Source: OECD

Migrants do send money on a regular basis to their friends and family back in the country of origin and those funds that the expatriates do send back to their countries of origin are called ***Remittances.***

1.2 Remittances : Historical background

Western Union and Moneygram are the biggest global money remittances companies in the world. Western Union started its activities as a telegraph company in 1856. Growing competition in the sector and the invention of the telephone afterwards, forced the company to move to communication activities. In 1920 it was acquired by *Bell* and operated as an important player in the communication industry till 1989.

The strategic move towards financial services was decided in 1989 and the company leveraged on its technical capacity on communications to execute international funds transfer. At that time, the company started to operate the U.S – Mexico corridor with a business model composed of money transfer agents on both the sending and the receiving side that were delivering the beneficiary clients mainly by cash (International Fund for Agriculture Development , 2017). The company improved later on its business model and enabled its clients to receive the money via bank transfers.

Moneygram was created in 1998 as a result of a merger between Travelers Express (founded in 1940) and Integrated Payment Systems Inc, a subsidiary of First Data Corporation. Interestingly, First Data Corporation was actually forced to sell its subsidiary Integrated Payment Systems by the Federal Trade Commission, after a merge with First Financial which was the owner of the rival f oWestern Union. In may 2018, Western Union had a market capitalization of 9,27 billion $ whereas Moneygram's amounted to 359.17 million $ (Yahoo.com, 2018)

Today, the migration dynamics as mentioned earlier have created a fragmented global market with new and smaller Remittances Service Providers (RSPs), operating a various of country corridors globally. A more pragmatic approach in legal framework and De-regulation in sending countries (with the Payment Service Directives in the E.U countries as we will develop later on), and payment innovations in the receiving countries (like Mobile Payments in Kenya for example) have largely contributed in lowering the cost of remittances.

1.3 Facts and Figures

The World Bank and KNOMAD calculated that remittances worldwide in 2017 amounted to **613 billion $** and the biggest portion of those flows, **466 billion $,** were directed to developing countries (World Bank, 2018). It's worth highlighting at this juncture that those figures are calculated based on data from IMF Balance of Payments Statistics database and data releases from central banks, national statistical agencies, and World Bank country desks. The International Monetary Fund has published a guide report in 2009 in which it underlined the limitations of Data collections when it comes to international transactions in remittances (International Monetary Fund, 2009), because of the nature of the flows involving individuals that might also use informal channels for the transactions. Although innovation and technology might have improved efficiency of data collection since then, as we will see later on in this paper, the reliability and accuracy of data remain subject to the accuracy of data provided by the local operators or local statistical agencies. In receiving countries, that can be still a bit challenging, but even in sending countries, as we will see for example for data concerning European countries, there can be some discrepancies when we compute figures taken from each individual country and compare them to the aggregated figures available with the World Bank.

Nevertheless, it is now unquestionable that, by any standard, migrant remittances are the largest type of international financial flows, and second only to foreign direct investment in terms of size (Chami, Ekkehard, Fullenkamp, & Oeking, 2018). Also, figures gathered from 1990 up to now, show that Remittances flows to low- and middle-income countries are larger than official development assistance and more stable than private capital flows (World Bank, 2018).

Another important feature of the migrant remittances flows in the receiving countries is that they tend to move *contra-cyclically* : by contrast to private capital flows and investments, remittances can rise during an economic downturn in the receiving country. This trend might be accelerated during a natural disaster for example. A recent study sponsored by the IMF sheds light on interesting relationship between remittances and labor markets in the Low income countries (LICs), Middle income countries (MIC) and fragile states (Chami, Ekkehard, Fullenkamp, & Oeking, 2018) . In a nutshell, The study points out that:

(i) effects of remittances in the receiving countries are significant and greater in size than those of Foreign Direct Investments (FDI) or Official Development Aid (ODA)

(ii) Remittances tend to reduce labor force participation and increase informality of the labor market, as far as the labor supply is concerned and;

(iii) Though remittances might reduce overall unemployment on the demand side, the benefits are mostly directed to precarious employment at the expense of more sustainable tradable sectors.

1.4 Sustainable Development Goals (SDGs) and Remittances cost

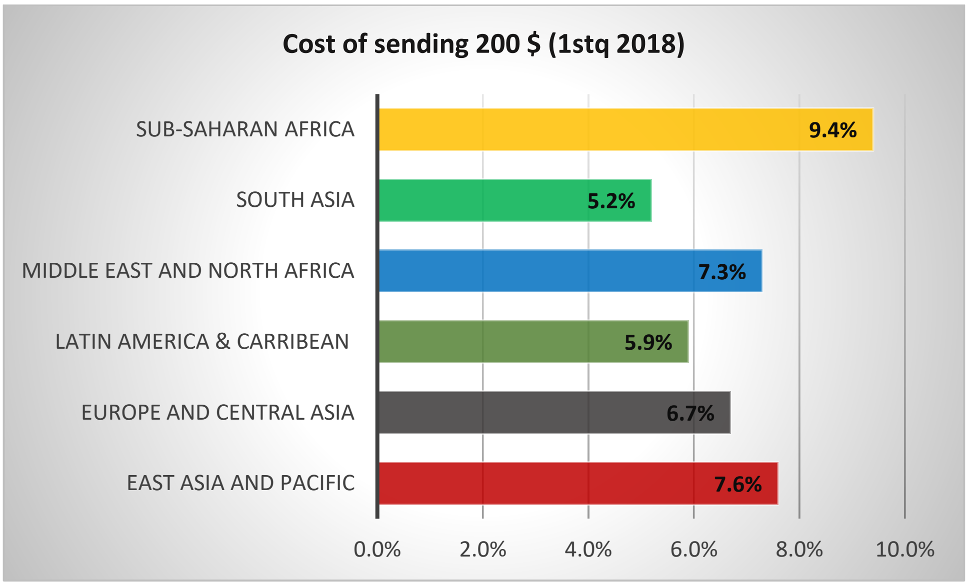
The Sustainable Development Goals are defined by the United Nations Development Program (UNDP) as "*a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity*" (United Nations Development Programme, 2018). The SDGs came into effect in January 2016 and are the institutions policy guidelines until 2030. The SDGs leveraged on the success of the Millennium Development Goals (MDGs) while including new areas such as reducing economic inequality, among others.

Reducing economic inequality is clearly mentioned as goal number 10 in the SDGs and one of this goal targets is to "***reduce to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent by 2030."*** Also, the G8 summit in L'Aquila (2010), the G20 summit in Cannes (2011) and Brisbane (2014) committed to reduce the global average total cost to 5 % (IBRD-IDA, 2017).

And yet, the current reality on transfer costs seems to be a bit far from those targets according to the World Bank's Remittances Prices Worldwide Database, though this cost has been continuously going down since the last fifteen years. On average, South Asia is the cheapest destination to send money to (5.2%) while Sub-Saharan Africa remained the most expensive (9.4%). It should be emphasized however that the data are based on a corridor from USA as a sending country. Remittances between countries of the same region are generally more expensive than stated, especially when it comes to Sub-Saharan Africa.

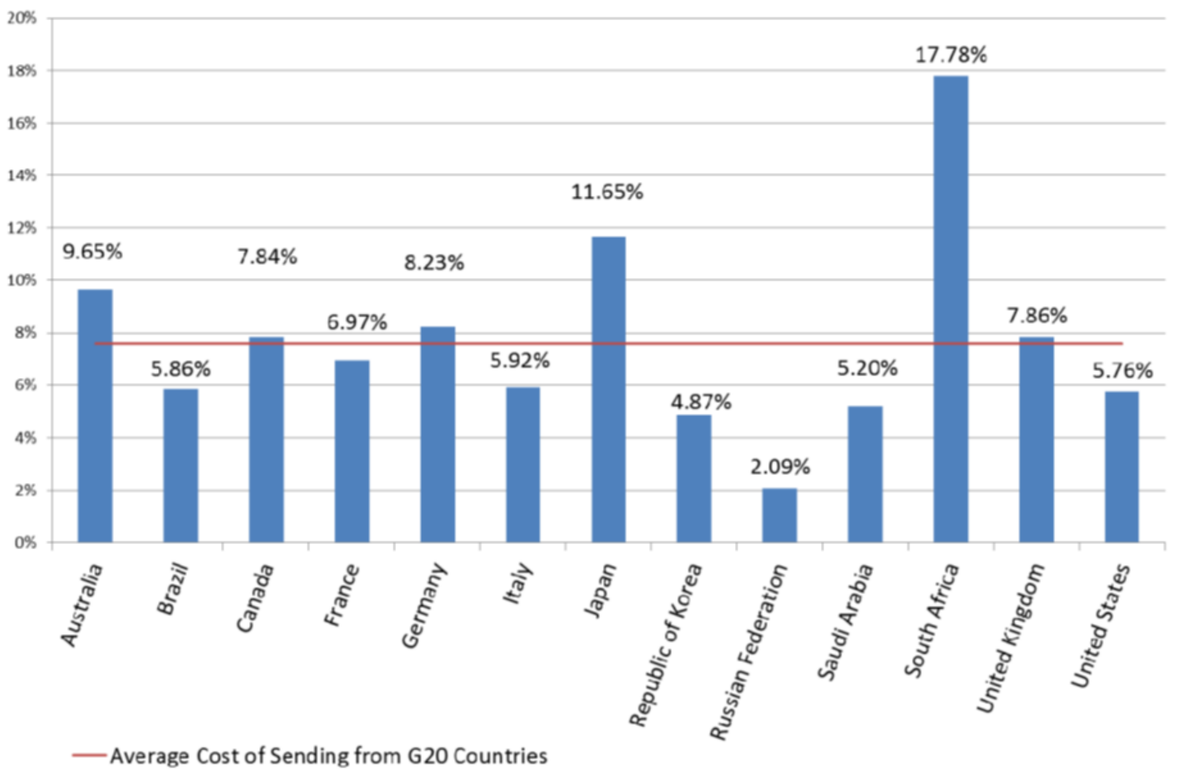
As an illustration, a cost comparison website certified by the World Bank shows the cost of remitting funds from Kenya to Rwanda can go, on average, as high as 10.63% and a transfer from Tanzania to Uganda can reach 15.11%[4].

[4] http://www.sendmoneyafrica-auair.org. Check made in May 2018. Costs based on fees applicable in March 2018.



Source : World Bank /Knomad

Average cost of remitting from G20 countries, by Country



Source : World Bank /Knomad

Increasing migration flows during the last twenty years has naturally created a bigger market for the remittances industry in developed country. This bigger market has largely benefited, at the early stage, to big players like Western Union and Moneygram who still have, till now, the biggest market shares. Technology innovation and a more flexible approach of the regulatory framework have however promoted smaller operators who partly disrupted the traditional business model by digitizing the sending process. Online-based models set up by Remittance Service Providers (RSPs) like Worldremit.com or Xoom.com have triggered a cost cutting trend as they were able to avoid fixed operating costs incurred by physical branches, while benefiting from the cash-out network that already existed in the receiving countries. It is worth underlining though that Western Union and Moneygram have also initiated online transfers but the fees they charge to their customers has remained, on average, higher than those charged by small players.

Much as the remittance experience has been largely digitized in the sending countries, payment options in the receiving countries remained largely dominated by cash-out agencies, especially in Sub-Saharan African. Within those African countries though, there are significant disparities and costs tend to be lower on destinations where the client can use technology like Mobile money or Mobile payment to get their funds. Indeed, mobile wallet and other cashless solutions, seem to be the main drivers to lowering the cost of remittances.

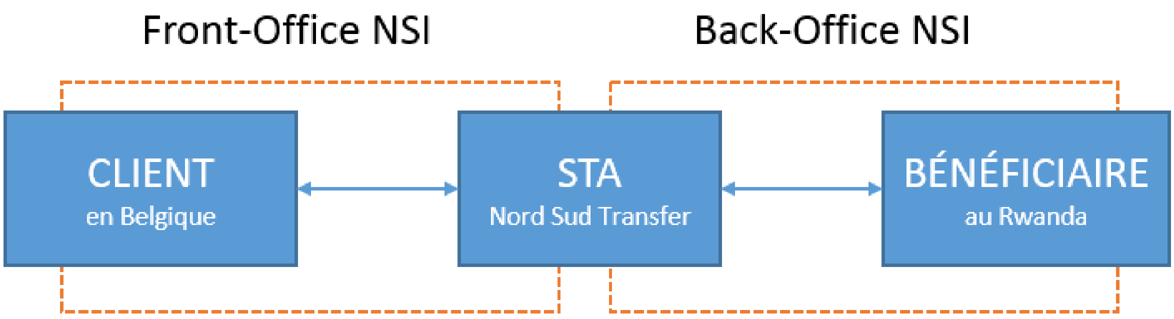
Market information and transparency remain the biggest challenge in the cost cutting endeavors. Beck & Martinez Peria (2011) pointed out that the cost of remittances is made up by two components: a fee component, and an exchange rate spread component. Indeed, many Money Transfer Operators (MTO) make huge profits on exchange rate mark-ups and customers are often unaware of this source of revenues. In countries like U.K where there are many small Money Transfer Operators, with some of them specializing in one or two corridors, we notice some operators do slash remittance fees (during some promotional periods, like Ramadan, costs of sending can be close to zero) and yet the operators are actually making margin on the exchange rates mark-ups.

In fairness to Remittance Service Providers in the sending countries however, exchange rate mark-ups are most of the time required by the Correspondents that ultimately give the money to the beneficiary in the receiving countries. To better understand the rationale behind those exchange rate mark-ups, we ought to get acquainted with the main actors and features in a remittance transaction :

(i) The Remittances Service Providers (RSPs - Money transmitter) in the sending country, and the Correspondent based in the receiving country. Correspondents in the beneficiary's receiving country might also be RSPs or other business entities[5]. Most of the time, Correspondent will be Banks or Microfinance Institutions as they will have a better geographical coverage in the receiving country.

(ii) The Correspondents do hand the money to the beneficiaries, on the request of the Money transmitter, ***before*** receiving the funds on its own bank account. The Correspondent is therefore actually making a ***cash advance*** to the beneficiary at the request of the RSP in the sending country. Later on, and on a periodic basis, the RSP in the sending country settles the amount handed out to the beneficiaries by a wire transfer in the receiving country, and adds a service fee owed to the Correspondent.

(iii) The partnership agreements between the RSP in the sending country and the correspondent in the receiving country most of the time stipulate that the settlement of the funds advanced and the service fee are made based on the currency of the sending country on the basis of ***historical transactions.*** Therefore, the correspondent in the receiving countries does incur an exchange rate risk as the settlement of the funds in the receiving country's local currency is initiated in the sending country's currency and after the amount has been handed out to the end beneficiary.

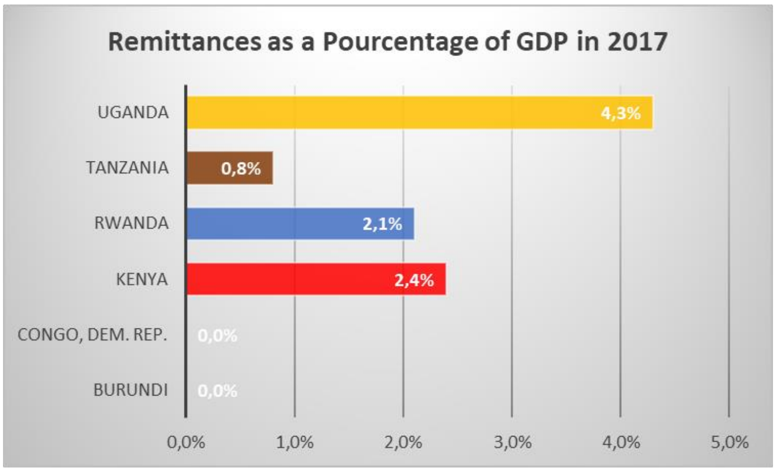


An illustration of a Remittance operation

It is this exchange rate risk on which the correspondents are exposed to, and the fact that the service fee they receive has been decreasing at the same pace than the remittance fees charged to clients in the sending countries, which led the Correspondents to fix exchange rate mark-ups. In other words, the beneficiaries in the receiving country receives funds in local currency at a rate which is below the

[5] It is not unusual to see independent traders or supermarkets in receiving countries, handing out funds to beneficiaries.

market rate. In doing so, the Correspondents hope to mitigate the risk of an exchange rate decrease between the time they disburse the funds and the time they receive the service fee and the reimbursement of the funds.



Source : World Bank /Knomad

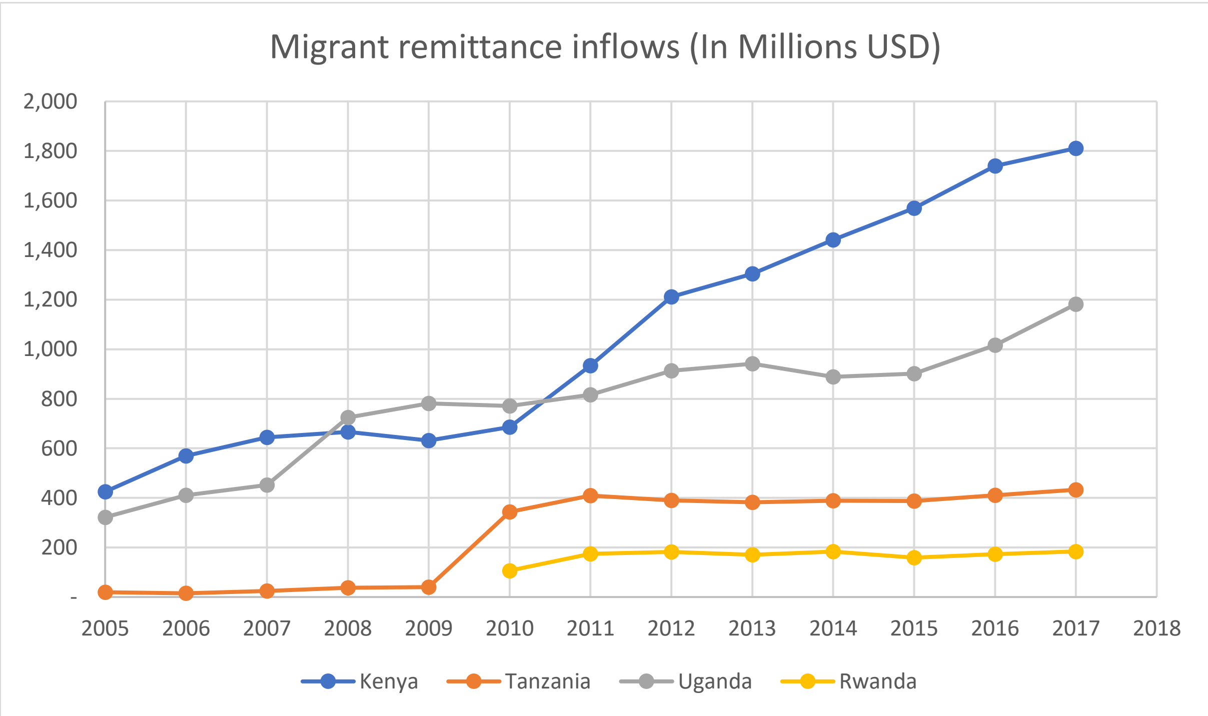
1.5 Financial inclusion in the receiving countries

This section strives to determine to which extent financial inclusion in the receiving countries affects remittances cost in the sending countries. Our assumptions are that senders will pay a lower cost for sending funds to their beneficiaries, if those same beneficiaries are in a receiving country with a population which is financially highly included.

Zins and Cull (2016) define financial inclusion as the fact that a person owns an account at a formal financial institution. The account should allow to save and borrow money, contract insurance and use payment services. A joint report from the Mastercard foundation and the International Finance Corporation stipulated that in 2018, 43 percent of the population in Sub-Saharan Africa were financially included. Moreover, according to do same report, countries such as Kenya, Tanzania, and the Democratic Republic of Congo have doubled their financial inclusion rate between 2012 and 2018 (Mastercard Foundation & International Finance Corporation, 2018). Two features seem to have been the main drivers of this great development : (i) Mobile Banking and innovation in the digital related financial solutions on one hand, and (ii) Agency Banking which had enabled to take basic financial transactions (account opening/closing, deposit and withdrawals) out of the bank premises.

Mobile Banking, when it comes to remittances, focuses on the innovative payment solutions that it offers rather than targeting savings and credit. Sub-Saharan Africa is the only region where the share of adults with a mobile account exceeds 10% (The Economist, 2018). M-PESA, a Kenya based mobile-payment scheme, is the most known mobile payment system in Sub-Saharan Africa. It was incepted in 2005 by Safaricom, the country's biggest mobile operator, which had noticed that users were lending to each other's mobile-phone airtime. The Company then thought it might be used to devise a scheme that enables small loans repayment. M-PESA account holders in Kenya currently amount to nearly 30 millions users and the sustained infatuation for the services it offers had inspired similar schemes across the region (The Economist, May 2018).

Money Transfer Operators have devised digital solutions that use mobile phone increasing features, to widen receiving channels and strived to reduce transfer costs. Moreover, as it will be highlighted further on, the regulatory environment has fostered innovative small players that leverage on technology to enhance the client's payment experience and efficiency. Senders can now send money by using an application on their mobile phone and beneficiaries can equally receive the funds directly on their smartphone. The E-wallet enables then the beneficiaries to either use directly the funds with a merchant or cash out the funds. In all the receiving countries mentioned in this study, Money Network Operators (MNO) that are active in the countries have developed several mobile solutions that compete with the local versions of M-PESA.



Source: World Bank/Knomad

In all the receiving countries observed, except for Tanzania, between 2005 and 2017, remittances flows have increased between 10.18% and 13.49% on average. The abnormal low base between 2005 and 2009 of the remittances flows in Tanzania seems to be more attributed to the relative low reliability on data collection from the central bank during this period.

The Global Findex Database, a World Bank initiative, encompasses comprehensive data on financial inclusion and updated indicators on access to and use of formal and informal financial services. It also gathers data on the use of financial technology (fintech), including the use of mobile phones and the internet to conduct financial transactions (World Bank, 2019). We have focused on two main features available in the database within a population which is more than 15 years old : (i) use and reception of digital payments and (ii) holding a Mobile Money account, and observe the evolution the figures in 2014 and 2017. Overall, we noticed that in the four receiving countries, the proportion of people that used or received digital payments, and the proportion of people that holds mobile money account has increased in 2017 compared to 2014.

	Use and reception of digital payments (%)		Mobile money accounts (%)	
	2014	*2017*	*2014*	*2017*
Kenya	72	84	58	73
Rwanda	27	39	18	31
Tanzania	35	42	32	39
Uganda	40	55	30	39

Source: Global Findex Database

Equally, an observation of two age ranges (between 15 and 24 years old , and more than 25 years old) sheds light on an increasing in number of accounts hold between 2014 and 2017 across all the receiving countries, though on a lower scale. Unsurprisingly, Kenya is leading by any standards in terms of rate of bank accounts holders, and mobile accounts penetration. The fact that, in some cases, the rise in digital payments or mobile money accounts may increase at a faster pace than the increase of the account holders, may indicate that some customers do probably use digital payments and mobile money accounts before even opening a bank account.

	Account holders (Age 15-24), in %		Account holders (Age 25+), in %	
	2014	*2017*	*2014*	*2017*
Kenya	66	76	79	84
Rwanda	23	41	51	54
Tanzania	32	36	44	47
Uganda	35	57	51	61

Source: Global Findex Database

Figures availed in the Global Findex indicate a positive trend of the financial inclusion in all the analyzed receiving countries. This trend has undoubtedly to do with the infatuation the remittances fintech continue to meet. Those fintech enable senders to remit payments using an online portal and credit/debit cards for the payment. Beneficiaries can thus either collect the funds in cash with an agent or receive the amount directly on their bank account or mobile phone. The online pattern enables MTOs to preclude intermediary fees incurred by physical agencies. And yet, most of the MTO in the sending countries do collect extra margins on exchange rates. This is usually done by refunding the correspondent at a lower exchange rate than market rate at the time of the transaction. Moreover, much as the online pattern allows costs control of the sending side and forex settlement rates, the receiving side remained controlled by the correspondents (MTO's, banks, microfinance institutions or Telecom companies in the receiving countries) when it comes to fix exchange rate at which the beneficiaries will ultimately receive the funds. As a result, the extra costs on exchange rate can outweigh the cost savings made by the online senders.

As an illustration, a rapid comparative analysis, realized in June 2019, of the cost of sending 200 Eur from Belgium to Rwanda among six money transfer operators[6] revealed remittance costs that range between 3,49% and 4,5% of the amount sent. Some operators (Moneygram and Transfer galaxy notably) were even displaying transfers free of charges, but a closer look revealed that the final amount the beneficiary will be collecting in the receiving country, in local currency, is equal, and in some cases might be even lower than by using historical operators like Western Union. Online services are no longer a competitive advantage for only the fintech as all operators do currently offer to the senders the option to send the funds using an online portal rather than queuing at a physical agency.

In a nutshell, technology and innovation have undoubtedly greatly contributed to higher financial inclusion in the receiving countries and reducing remittances costs in the sending countries. However, the ultimate target embedded in the Sustainable Development Goals, of "*reducing to less than 3 per cent the transaction costs of migrant remittances and eliminate remittance corridors with costs higher than 5 per cent by 2030",* remains far from being achieved. Exchange rate margins that are applied either by the Remittance Service Providers, or by the Correspondents often cancels out the gain obtained by the reduction of the sending fees. Widening receiving channels by using mobile payments could have an even greater impact in the financial inclusion process if the *merchant hindrance* was to be addressed. Except in Kenya where M-Pesa has a wide outreach among merchants, in all other receiving countries merchants ought to be deeper integrated in the digitization process, in terms of connectivity and interoperability. It is good to have the funds sent directly to its mobile phone, but it would be even better if the funds could be directly spent with a merchant, or to

[6] Azimo, Moneygram, Moneytrans, , Transfergalaxy, Western Union, and Worldremit,

any other kind of business, without having to collect the amount with a local bank or microfinance institution.

1.6 Remittances Data 2000-2017

This section aims at highlighting the trend in variation of migrants remittance flows from a sample of European sending countries[7]. The figures highlighted however indicate the migrants remittance outflows *globally*, and not specifically towards the receiving countries that we focus on in this study. The key element to emphasize on is the trend in remittances flows. We scrutinized the variations in flows during two specifics periods (2000-2008 and 2009-2017) and looked on the global average variation for the two specific periods. The rationale behind the process was to find out whether the implementation of the first Payment Service Directive (PSD1) which was adopted by the European Union in 2007, as it will be elaborated in the next topic, had a measurable impact on outward remittances flows in the sending European countries.

Remittances outflows

Countries	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**Average % Δ**	**2009**	**2010**	**2011**	**2012**	**2013**	**2014**	**2015**	**2016**	**2017**	**Average % Δ**
Austria	1,298	1,422	1,518	1,874	2,226	2,120	2,301	2,593	2,985		2,907	2,991	3,623	3,452	3,896	4,961	4,748	5,050	5,475	
% Δ		*9.55%*	*6.75%*	*23.45%*	*18.78%*	*-4.76%*	*8.54%*	*12.69%*	*15.12%*	*11.27%*	*-2.61%*	*2.89%*	*21.13%*	*-4.72%*	*12.86%*	*27.34%*	*-4.29%*	*6.36%*	*8.42%*	*7.49%*
Belgium			1,843	2,326	2,620	2,427	2,564	3,202	4,124		4,479	4,185	4,556	4,239	4,488	4,501	4,395	4,514	4,700	
% Δ				*26.21%*	*12.64%*	*-7.37%*	*5.64%*	*24.88%*	*28.79%*	*15.13%*	*8.61%*	*-6.56%*	*8.86%*	*-6.96%*	*5.87%*	*0.29%*	*-2.36%*	*2.71%*	*4.12%*	*1.62%*
Denmark	662	745	860	1,030	1,230	1,512	1,775	3,054	4,025		3,391	2,833	3,148	2,979	3,059	3,172	2,781	2,914	3,078	
% Δ		*12.54%*	*15.44%*	*19.77%*	*19.42%*	*22.93%*	*17.39%*	*72.06%*	*31.79%*	*26.42%*	*-15.75%*	*-16.46%*	*11.12%*	*-5.37%*	*2.69%*	*3.69%*	*-12.33%*	*4.78%*	*5.63%*	*-2.44%*
Finland	100	97	113	149	225	266	437	553	685		686	721	445	775	835	762	927	881	897	
% Δ		*-3.00%*	*16.49%*	*31.86%*	*51.01%*	*18.22%*	*64.29%*	*26.54%*	*23.87%*	*28.66%*	*0.15%*	*5.10%*	*-38.28%*	*74.16%*	*7.74%*	*-8.74%*	*21.65%*	*-4.96%*	*1.82%*	*6.51%*
France	3,770	3,950	3,810	4,390	4,260	9,475	10,281	11,947	13,269		11,757	12,029	12,849	12,566	13,425	13,726	12,787	13,312	13,503	
% Δ		*4.77%*	*-3.54%*	*15.22%*	*-2.96%*	*122.42%*	*8.51%*	*16.20%*	*11.07%*	*21.46%*	*-11.39%*	*2.31%*	*6.82%*	*-2.20%*	*6.84%*	*2.24%*	*-6.84%*	*4.11%*	*1.43%*	*0.37%*
Germany	9,039	9,445	10,403	11,886	13,003	12,708	12,697	14,084	15,232		15,323	14,683	16,116	15,588	19,979	20,078	18,033	20,290	22,091	
% Δ		*4.49%*	*10.14%*	*14.26%*	*9.40%*	*-2.27%*	*-0.09%*	*10.92%*	*8.15%*	*6.88%*	*0.60%*	*-4.18%*	*9.76%*	*-3.28%*	*28.17%*	*0.50%*	*-10.19%*	*12.52%*	*8.88%*	*4.75%*
Greece	546	536	412	380	497	902	982	1,460	1,912		1,843	1,932	1,941	1,438	1,291	1,424	1,870	1,800	2,082	
% Δ		*-1.83%*	*-23.13%*	*-7.77%*	*30.79%*	*81.49%*	*8.87%*	*48.68%*	*30.96%*	*21.01%*	*-3.61%*	*4.83%*	*0.47%*	*-25.91%*	*-10.22%*	*10.30%*	*31.32%*	*-3.74%*	*15.67%*	*2.12%*
Ireland	181	274	588	788	997	1,441	1,853	2,520	2,672		2,549	2,267	2,194	1,996	1,958	1,960	1,564	1,541	1,614	
% Δ		*51.38%*	*114.60%*	*34.01%*	*26.52%*	*44.53%*	*28.59%*	*36.00%*	*6.03%*	*42.71%*	*-4.60%*	*-11.06%*	*-3.22%*	*-9.02%*	*-1.90%*	*0.10%*	*-20.20%*	*-1.47%*	*4.74%*	*-5.18%*
Italy	2,582	2,716	3,582	4,367	5,513	2,588	2,463	2,871	14,445		14,390	12,886	14,501	11,826	11,566	11,133	9,443	9,173	9,256	
% Δ		*5.19%*	*31.89%*	*21.92%*	*26.24%*	*-53.06%*	*-4.83%*	*16.57%*	*403.13%*	*55.88%*	*-0.38%*	*-10.45%*	*12.53%*	*-18.45%*	*-2.20%*	*-3.74%*	*-15.18%*	*-2.86%*	*0.90%*	*-4.42%*
Luxembourg	2,720	3,140	3,953	5,011	6,002	6,699	7,561	9,370	11,006		10,725	10,645	11,720	11,343	12,237	12,865	11,179	11,640	12,666	
% Δ		*15.44%*	*25.89%*	*26.76%*	*19.78%*	*11.61%*	*12.87%*	*23.93%*	*17.46%*	*19.22%*	*-2.55%*	*-0.75%*	*10.10%*	*-3.22%*	*7.88%*	*5.13%*	*-13.11%*	*4.12%*	*8.81%*	*1.83%*
Netherlands	3,128	2,853	2,893	4,236	5,034	4,547	6,076	10,086	12,696		11,662	9,398	10,246	9,576	9,686	8,280	10,195	10,482	11,355	
% Δ		*-8.79%*	*1.40%*	*46.42%*	*18.84%*	*-9.67%*	*33.63%*	*66.00%*	*25.88%*	*21.71%*	*15.63%*	*-25.98%*	*9.02%*	*-6.54%*	*1.15%*	*-14.52%*	*23.13%*	*2.82%*	*8.33%*	*1.45%*
Portugal	454	706	792	936	1,164	436	445	346	388		518	506	627	499	493	356	235	376	381	
% Δ		*55.51%*	*12.18%*	*18.18%*	*24.36%*	*-62.54%*	*2.06%*	*-22.25%*	*12.14%*	*4.96%*	*33.51%*	*-2.32%*	*23.91%*	*-20.41%*	*-1.20%*	*-27.79%*	*-33.99%*	*60.00%*	*1.33%*	*3.67%*
Spain	2,491	3,078	3,792	5,141	6,975	733	794	897	749		557	434	456	379	334	372	368	304	362	
% Δ		*23.56%*	*23.20%*	*35.57%*	*35.67%*	*-89.49%*	*8.32%*	*12.97%*	*-16.50%*	*4.16%*	*-25.63%*	*-22.08%*	*5.07%*	*-16.89%*	*-11.87%*	*11.38%*	*-1.08%*	*-17.39%*	*19.08%*	*-6.60%*
Sweden	539	578	508	496	545	729	930	1,056	1,206		1,071	1,160	1,390	1,387	1,623	1,584	1,242	1,212	1,672	
% Δ		*7.24%*	*-12.11%*	*-2.36%*	*9.88%*	*33.76%*	*27.57%*	*13.55%*	*14.20%*	*11.47%*	*-11.19%*	*8.31%*	*19.83%*	*-0.22%*	*17.02%*	*-2.40%*	*-21.59%*	*-2.42%*	*37.95%*	*5.03%*
United Kingdom	2,048	3,340	2,438	2,626	3,552	9,643	10,646	11,597	11,212		9,275	9,565	9,931	10,077	10,528	11,569	10,703	10,187	9,727	
% Δ		*63.09%*	*-27.01%*	*7.71%*	*35.26%*	*171.48%*	*10.40%*	*8.93%*	*-3.32%*	*33.32%*	*-17.28%*	*3.13%*	*3.83%*	*1.47%*	*4.48%*	*9.89%*	*-7.49%*	*-4.82%*	*-4.52%*	*-1.26%*

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[7] The countries included in our sample are: Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, Netherlands, Portugal, Spain, Sweden, United Kingdom

At this juncture, it's worth underlying that even in the European countries, collecting statistics that specifically and only related to remittances data remain challenging as large variances can occur from one year to another without being there a valid underlying economic reason. From our experience while heading a small Money Transfer company back in 2006 that was operating only in the Belgium-Rwanda corridor, we witnessed that abnormal large variation form one year to another can be caused by a different way (more accurate) of collecting data. As an illustration, up to 2009, the National Bank of Belgium (NBB) was collecting remittances data using Banks' disclosure on external transactions. From 2007 onward, the data were collected from a sample of non-banking financial institutions, and remittances transactions that were made in cash through international money transfer operators that were based in Belgium were not taken into account. Thus, NBB published only aggregate data on external transactions to mitigate the uncertainty of the geographical distribution of remittances transactions[8]. This collection method hypothesis tends to be corroborated by the fact that a large variation in remittance outgoing flows in a given country (for example a delta of 403,13% between 2007 and 2008 for Italy, or – 89,49% between 2004 and 2005 for Spain), cannot be explained by a large inflows or outflows of immigrants in the same country for the same period, if we refer to OECD statistics[9].

Notwithstanding a more pronounced remittances culture and history in UK, as a direct consequence of the high ethnic diversity among the population, the same reasoning may be applied for the remittances flows evolution in UK and France where the variation was respectively 171.48% and 122.42% between 2004 and 2005. It is worth underlying also that the UK market has the second larget amount of remittances outward flows after Germany. As explained in the first chapter, presence of a high proportion of immigrants among the population is a big determinant of outward remittances flows, but legal framework and the approach of the national regulator is decisive. As far as the UK market is concerned, the pragmatic approach of the regulator in transposing the Payment Service Directives, may have been paramount in the essor of the remittances industry in UK. As a matter of fact, the regulator has enabled some money transfer operators to register as Small Payment Institutions (SPI), under the conditions that will be detailed further on, with legal requirements that are more flexible and proportionate to the size of the applicant.

We noticed that for all sending countries the global yearly average variation between 2000 and 2008 is much higher than the same measure between 2008 and 2017. Five out of fifteen sending countries among the sample have even a negative yearly average variation, whereas all of them had a positive yearly average variation between 2000 and 2008. We posit this downward trend may reflect a consequence of the financial crisis that hit the economies of the sending countries.

[8] Information collected from E-mail exchange with Mrs Nadine Feron on 27th October 2011
[9] www.oecd.org

1.7 Countercyclicality in the short term Vs Procyclicality in the long run

Dilip Ratha (2013) suggests remittances flows are countercyclical financial flows and behave very differently than private capital flows. Remittances flows are indeed uncorrelated with the financial markets in the sending countries. Yet, the figures observed suggest that the economic downturn created by the major financial crisis in 2008, had an impact on the trend of outward remittances flows from the european countries, though they were hit by the crisis in a disparate way. From 2000 to 2008, the lowest and highest yearly average variation were respectively 4.16% (Spain) and 55.88% (Italy) whereas the equivalent measures from 2009 to 2017 were respectively negative 6.60% (Spain) and 7.49% (Sweden). From te observed sample of sending countries, we can therefore extrapolate that in the short run the remittances flows might be counterycilcal but will necessarily adjust towards procyclicality in the long run. Shall the economic downturn persists, the immigrants will also inevitably face the unmployment, thus the remittances will tend to become scarce. Needless to mention again that the observed outward flows in the sending countries are indicated on a global basis, withouht geographical repartition. Chami et al. (2010) estimated the impact of the global economic crisis on African GDP via the remittance channel during 2009-2010, and predicted remittances flows to Africa to decline by 3 to 14 percentage points. Notwithstanding the limited sample size of the observed sending countries, we noticed *ex-post* that remittances flows declined indeed.

In parallel, we do analyze the variation trend in the receiving countries for the period 2005-2017. There is a stable but increasing trend for all the receiving countries, though Kenya has a higher baseline. As mentioned earlier, (i) technology innovation that enables, among other things, using online services in the sending countries and (ii) a deeper financial inclusion in the receiving countries, have been instrumental in the increasing trend of remittances inflows in the receiving countries, though the pace slowed down in the aftermath of the 2008 financial crisis. Furthermore, Digitization in the receiving countries, where Kenya seems to be better off , has widen the receivers base and contributed, to some extent, to the decrease of remittances fees.

Remittance inflows

	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	Average % Δ
Kenya		51	57	66	376	425	570	645	667	631	686	934	1,211	1,304	1,441	1,569	1,745	1,962	
% Δ			12.23%	15.23%	471.04%	13.03%	34.23%	13.10%	3.43%	-5.37%	8.60%	36.22%	29.64%	7.70%	10.47%	8.91%	11.18%	12.47%	42.63%
Rwanda	7	8	7	10	10						106	174	182	170	184	159	173	215	
% Δ		18.47%	-8.15%	33.36%	2.02%	-100.00%	0.00%	0.00%	0.00%	0.00%	0.00%	63.61%	4.71%	-6.69%	7.87%	-13.29%	8.36%	24.79%	2.06%
Tanzanie	8	15	12	9	14	19	15	25	37	40	344	410	390	382	389	388	403	403	
% Δ		90.66%	-21.33%	-25.83%	55.04%	40.35%	-20.58%	65.54%	44.61%	8.17%	764.46%	18.96%	-4.74%	-2.10%	1.98%	-0.44%	3.81%	0.03%	50.92%
Uganda	238	349	442	299	311	322	411	452	724	781	771	816	913	941	888	902	1,146	1,166	
% Δ		46.64%	26.65%	-32.35%	4.01%	3.48%	27.72%	9.87%	60.22%	7.96%	-1.32%	5.90%	11.89%	3.00%	-5.64%	1.64%	27.03%	1.72%	11.67%

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1.8 Termination of exclusive contracts

Western Union and Moneygram are leaders of the remittances market with respectively 5,5289 and 1,447 billion in 2018[10] has for a long time worked with the banks in the receiving countries, on the basis of exclusive contracts meaning they were not allowed to work neither with another Payment Service Provider nor with another bank to offer cash to cash payment services. This monopolistic situation strangled competition and kept remittances fees high . Much as financial inclusion and digitization has facilitated to lower the cost of remittances, the gradual removal of exclusive contracts imposed by Western Union and Moneygram to banks in the receiving countries greatly contributed to the end of the monopolistic situation, leading to an irrevocable downward movement of remittances fees as a result of greater competition.The move started back in 2001 in Russia where a Russian bank (Russlavbank) had developed a money transfer service called *Contact* across the country and outside of the country thanks to partnerships with other Russian banks that had set up an efficient network. Between June and July 2001, three banks that were partnering with Russlavbank informed their partner that they were not in position to continue partnering with the Russian bank as their correspondent in the *Contact* network (Moré, 2015). The reason was the same for all the banks : they were bound to a new partner in money transfer activities, Western Union LLC, which used his dominant position to oblige them to accept exclusive contracts. Russlavbank filed a claim against Western Union with the competition authorities. After a three years legal battle, exclusive contractual terms were deemed as an abuse of a dominant position and a restriction of access to the market by new comers. Consequently, all the exclusivity in contracts had to be revoked.

Since then, regulators in many countries followed the trend in explicitly forbidding such exclusive clauses, especially in remittances receiving countries. The financial regulatory bodies in those countries (most of the time Central Banks) issued regulations that prevent or nullified existing clauses (Ethiopia 2006; Nigeria 2008, India 2010, Liberia 2011, Rwanda 2013, Tunisia 2013) (Moré, 2015). We are of the opinion that the removal of those entry barriers in the receiving countries has contributed, to a lesser extent, to enhance competition in the market as well as IT innovation or de-regulation in the sending countries did.

[10] fr.finance.yahoo.com

II. Payment Services Directives.

2.1 The first Payment Service Directives (PSD 1) : Rationale & Key elements

Beck and Martinez Peria (2011) analyzed 119 corridors to explain the key factors of cost remittances. They posit (i) socio-economic factors such as the stock of migrants and the level of economic development, (ii) efficiency of the market which drives the level of competition and access to information by senders for example, and (iii) regulatory environment and breadth of regulation of remittance service providers, are the main determinants as far as the cost of remittances is concerned. With respect to the regulatory environment, the observation of the cost behavior of the corridors led the authors to conclude that *costs are lower in corridors where sending countries have a broader regulatory framework for remittance service operators.* Though a broader regulation may fuel competition and remittances market efficiency, the authors rightly predicted and raised a concern on whether a greater exposure to regulations would not cause an increase of costs for the regulated institutions as they will have to incur compliance costs. As a matter of fact, the empirical results of their observations found no robust association between the costs of remittances and the breadth of regulation of remittance service providers. That would make us infer indeed that remittance service providers that would face compliance costs induced by a narrower and more stringent regulatory environment, will pass the costs onto the customers. As we shall see further below, the concerns raised then seem particularly accurate and relevant today.

We have previously exhibited how the remittances market was dominated by multinational players like Western Union and Moneygram. Also, though Beck and Martinez Peria (2011) included banks among the remittances service providers to measure the market structure, as a potential determinant for remittance costs, we ought to underline that banks only play a major role in remittances if the legislation in place limits remittance services to banks and financial institutions (Ratha & Riedberg, 2005). In the European Union, prior to the disruption of the regulation with the Payment Service Directives, the remittance market was divided in an oligopolistic way between banks and major remittance service providers[11]. However, remittance services were peripheral activity for banks. Indeed, a customer using bank services for remittances implies that the beneficiary has also a bank account which is not always the case even if, as we have seen, digitization and financial inclusion have improved the situation in this regard. A typical customer, that need to send money back home to an unbanked beneficiary would then use one of the major player that existed then on the market. Before the harmonization with first Payment Service Directive in 2007, the regulatory framework across the European Union was disparate

[11] Typically Western Union, Moneygram or Ria

regarding the requirements to secure a license, without obvious reasons. Some countries would require to operate under a Banking regulation whereas others would authorize to operate under a financial institutions license. The adoption of the Payment Service Directives was thus mainly driven by the need the harmonize and set up a common framework for payment services and initially aimed at creating a level playing field between Bank and non-bank Payment Service Providers(PSPs).

2.2 Remittances in the context of PSD 1 and PSD 2

The European legislator had clearly defined Payment services as business activities that (i) allow people to deposit or withdraw cash on or from a payment account, as well as the operation of that account, (ii) execute payment transactions (e.g. standing orders, direct debits, etc.) both on payment accounts or by electronic means, (iii) issue and/or receive payment instructions and/or (iv) execute money remittance, specified as transfers of money by foreign workers to persons in their home country (European Commission, 2016). The first Payment Service Directive (PSD 1) was adopted by the European Parliament and the Council on 13th November 2007 and member countries had up to 1st November 2009 to transpose the directive into the national laws. An annex to the law detailed six activities that the applicant is entitled to undertake, which will be extended to eight with the second Payment Service Directive.

Much as it might seem obvious, the primary role of a bank is to grant credit. By holding clients funds, they are obliged to make the payment on their behalf. Thus, payment service is an incidental activity for banks. Therefore, European legislator strived to increase consumer protection and transparency by establishing a maximum time for payments in euro and EU currencies. The ultimate outcome has been the establishment of a Single Euro Payments Area (SEPA) which set common standards, improved the efficiency of cross-border payments and turn the fragmented national markets for euro payments into a single domestic one[12]. The directive met its expectations as it enabled the emergence of many non-banking payment service providers, and boosted competition. Technology and innovation brought in by new startups contributed to slash payment fees that might be high with traditional banking players even for an intra-European transfer, let alone international remittances. However, most of the new players focused on intra-European cross border and international payments, but targeting a customer base in which both the sender and beneficiary have a bank account. Thus, users and customers for international remittances did not take that much advantage of the decrease in fees. UK is a notable exception

[12] SEPA members currently include 28 member states of the European Union, the four member states of the European Free Trade Association (Iceland, Liechtenstein, Norway and Switzerland), and Andorra, Monaco, San Marino, and Vatican City

though as small Remittance Service Providers were active prior to the adoption of the Payment Service Directive and flourish after the adoption of the Directive driven mainly by (i) a high customer base that stems from the presence of a diverse and migrant population and (ii) a provision of the regulatory framework that enable *Small Payment Institutions (SPIs)* to operate under more flexible and less restrictive legal requirements.

2.3 Is small still beautiful ?

Small Payment Institutions are also called exempted payment institution. The European parliament and commission emphasized two key principles in the statement of grounds of the directive that the national regulators should keep in mind while scrutinizing the payment institutions authorization requests: the principle of *non-discrimination* and the principle of *proportionality*. While the first principle is self-explanatory, the second aimed at emphasizing that the national regulators should consider the nature and the size of operations of the applicant in assessing the level of risk the payment institution may represent for the financial system. This move clearly intended at enabling small payment operators to operate.

The first Payment Service Directive required that a payment institution that operates, or plan to operate, payment transactions for which the average turnover for three years would be less or equal to three million. For those *exempted (or also referred to as small)* Payment Institutions, the national regulator applies the *proportionality* principle with respect to the infrastructure, operational procedure and internal control process that are normally required under the national regulation. However, Payment Institutions that are granted an exemption status cannot benefit from the freedom to provide its services in any other European Member States than the country of registration. Thus, they cannot benefit from the European passport which would normally enable any Payment Institution registered in one member country, to operate in another member country by only notifying the regulator. In some cases, the provision of exemption misled some start up promoters whereby they confused and thought that, as long as the expected turnover would be under the threshold of three million euros, they could start operating without requesting the license with the regulator (Vermeulen, 2017), whereas in fact they should request a specific *waived/exempted* license to the regulator.

2.4 Open Banking disruption

As predicted, the first Payment Service Directive greatly fostered payment solutions throughout the European Union as a concrete implementation of the Single European Payment Area (SEPA), for safer and more innovative payment services across the EU. The new regulatory framework spurred the emergence of new Fintechs in the market that enabled instant online payment and offered more choice consumers among an enhanced competition. It stemmed also from the payment systems harmonization, new types of payment services that needed to access data detained by bank and bank's IT infrastructure, mainly the (i) Payment Initiation Services Providers *(PISP)* – companies offering consumer or business-oriented payment services based on the access to the information from the payment account- and, (ii) Account Information Services (AIS) - services that allow consumers and businesses to have a global view on their financial situation by enabling consumers to consolidate the different payment accounts they may have with one or more banks and to categorize their spending according to different typologies (food, energy, rent, leisure, etc.), thus helping them with budgeting and financial planning (European Commission, 2019). Those new payment services provided cheaper and secure alternatives for credit card based payments, but were not regulated within the scope of PSD1 which represented a risk of consumer protection erosion and competitive distortion, as a result of regulatory arbitrage. Furthermore, as per mentioned earlier on, the member states' regulators interpreted and transposed the exemption provision in various ways leading to legal uncertainty that could endanger the harmonization process and impair consumers' rights (European Commission, 2019). The European Commission proposed therefore a second Payment Service Directive (PSD 2) that would widen the scope of the first directive, create a level playing field for the different providers, and enhance security requirements for consumers on the majority of electronic payments. An important requirement for consumers protection is the *Strong Customer Authentication* (SCA) which requires, for the majority of electronic payments, to be performed with a multi-factor authentication to increase the security of electronic payments.

The Second Payment Service Directive was adopted in November 2015 by the Council of the European Union and came into force in January 2018. As far as Payment Service Providers involved in remittance activities are concerned, the second Payment Service Directive foresees for the "*one leg transaction*" meant for transactions to people outside the EU. The move aimed at contributing to better information on the market by the money remitters and, in so doing, lowering the cost of money remittances as result of higher transparency (European Commission, 2019). Also, the provision of *Exempted or Small Payment Institution* was kept in the PSD 2 although, as explained in the following section, we have noticed that only six out of fifteen European countries involved in this study have authorized payment institutions to operate under the exemption license. The European legislator foresaw transitional provisions for Payment Service Providers that were operating under a PSD 1 license. The institutions were allowed a transition period of 30 months (36 months for exempted/small institutions) before fully comply with PSD 2. In practice, European regulators have obliged the then licensed Payment Institutions to comply with PSD 2 way before the transitional period of 30 or 36 months. In some countries, in Belgium for example, the regulator has even chosen that no more Payment Institutions involved in remittance activities will be licensed under the provision of exempted/small Payment Institutions, full requirement with PSD 2 is since then mandatory. In so doing, we think the regulator has *de facto* deprived remittance operators with limited corridors and/or network, of the benefits of the *proportionality* principle. As we shall see, in addition to the de-risking behavior from banks[13], regulatory requirements that tend to be "*one size fits all*" oriented may, at the end of the day, represent a major hindrance to Payment Service Providers that wish to operate remittance activities within limited corridors or limited network. All in all, the second Payment Service Directive aimed mainly at addressing legal loopholes surrounding new Fintechs that needed to access use information available on payment accounts of the users. The new rules seek to ensure that digital technology sharpens competition, by loosening banks' grip on customers' financial data, but without compromising security (The Economist, 2019). It clarifies and include explicitly in its scope one-leg transactions, though we think those *asymmetric* transactions were implicitly covered in PSD 1. Other than that, one would say that PSD 2 didn't come along with major upheavals related to remittance activities as all relevant regulatory requirements were covered in the first version of the Directive.

[13] We highlight in the following section how the Banks are reluctant to work with Payment Service Providers involved in remittance activities. The banks argue the Money Laundering risks inherent in remittance activities is too high compared to the expected benefits.

III. Payment Institutions in Europe

3.1 Registered Payment Service Providers

The European Banking Authority, an independent apex EU Authority which works to ensure effective and consistent prudential regulation and supervision across the European banking sector (European Banking Authority, 2019), holds a register with all registered Payment Institutions (fully licensed or exempted) in EU, whereby information on natural or legal person included in the register is given by the competent authority at national level. We have gathered information related the fifteen EU countries that are in the scope of our study, and counted for each country (i) the number of PSP's registered, (ii) the number of *exempted* PSP's registered and (iii) number of PSP's offering money We also refer to the appendix of the Directive which includes and details eight specific payment services that can be undertaken by the PSP's that are registered. The national jurisdictions have transposed the appendix as it stands in the Directive, and Money Remittances is reflected under section 6. Equally important, the regulatory enforcement by the supervision authorities is exercised on a dynamic basis and a PSP can be revoked along the way if it does not comply anymore with legal requirements or reporting obligations.

On this regard, our observations are limited by the fact that we have gathered data of registered payment at the date of observation[14], but were not able to gather data on an historical basis to take into consideration the number of payment institutions that have been revoked. Concomitantly, we have analyzed the remittances outflows from the fifteen EU countries, looking whether there might be a correlation between the number of registered Payment Service Providers (either fully licensed or exempted) that are active in remittances activities, and the magnitude of the outflows remittances from 2000 to 2017. In this context, the impact of the PSD 2 cannot really be observed as it came into force in early 2018. At the same time, and as mentioned earlier on, we can reasonably hypothesize that the PSD 2 didn't have a significant impact on PSPs involved in remittances activities. Indeed, despite spelling out explicitly that PSD 2 provisions were extended to one-leg transactions, most of the provisions were already included in the first version of the Directive.

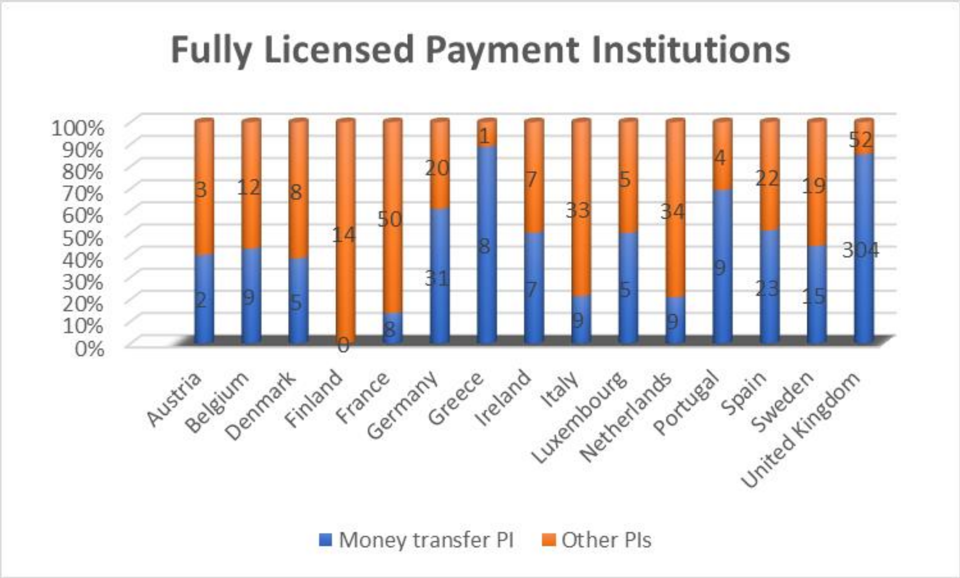
[14] 20th -21st June 2019

Registered Payment Institutions

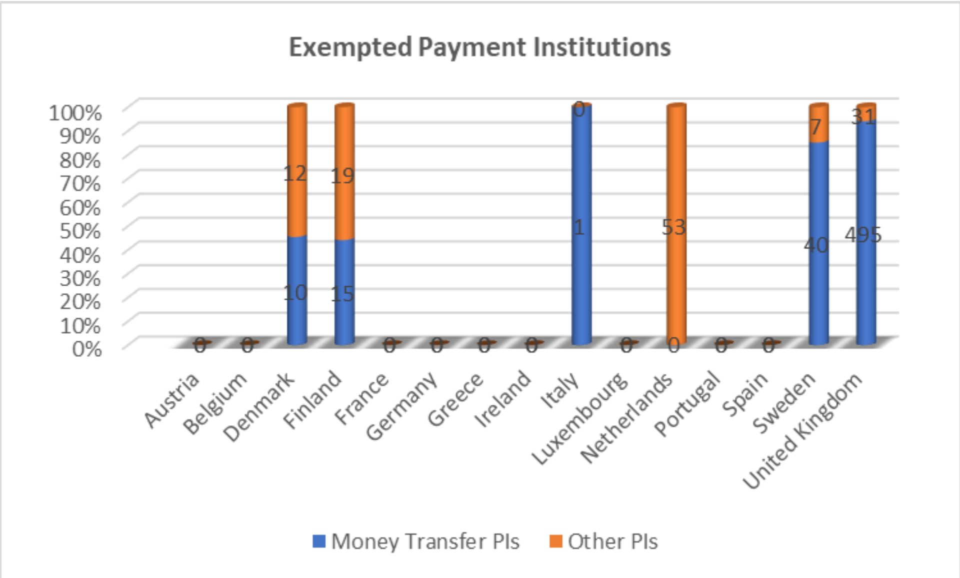
	# P.I			# Exempted/Small P.I		
Country	MSB	Other PIs	Total	MSB	Other Pis	Total
Austria	2	3	5	0	0	0
Belgium	9	12	21	0	0	0
Denmark	5	8	13	10	12	22
Finland	0	14	14	15	19	34
France	8	50	58	0	0	0
Germany	31	20	51	0	0	0
Greece	8	1	9	0	0	0
Ireland	7	7	14	0	0	0
Italy	9	33	42	1	0	1
Luxembourg	5	5	10	0	0	0
Netherlands	9	34	43	0	53	53
Portugal	9	4	13	0	0	0
Spain	23	22	45	0	0	0
Sweden	15	19	34	39	8	47
United Kingdom	304	52	356	495	31	526

European Banking Authority Register

From the observations, we were unable to establish an obvious correlation between the number of registered fully or exempted Payment Institutions in a particular country, and the amount of remittance outflows from that country. As an illustration, we can highlight that, according to the EBA register, Sweden has fifteen fully licensed and forty exempted payment institutions, and yet remittances outflows are almost ten times lower than those from Luxembourg with only five fully licensed payment institutions. Indeed, socio-economic factors such as the stock of migrants and the level of economic development, as explained by Beck and Martinez Peria (2011), might be a more relevant factor to determine remittance flows. Germany, as the highest sender in all the EU countries observed, accentuates this hypothesis. It has the highest remittance outflows while it has the third number of registered payment institutions involved in remittance activities, after United Kingdom and Sweden. On the other hand, Austria has the lowest number of payment institutions (both fully licensed and exempted) involved in remittances activities, and yet its remittance outflows outweigh those from Denmark or Sweden which has respectively three and eleven times more registered remittances active payment institutions.



European Banking Authority



European Banking Authority.

3.2 Overestimation of PSPs involved in the remittances activities

The case of Sweden, i.e having a high number of registered payment institutions (both fully licensed and exempted), but still exhibit low remittance outflows, is not idiosyncratic. Finland and Spain[15] show the same trend. We consider two possible explanations for this situation (i) an overestimation of payment institutions involved in remittances activities due to the legacy of the regulatory framework that was applicable prior the transposition of the first and second directives, and (ii) the peripheral, or even sometimes, inexistent nature of remittances activities for some PSPs that are nonetheless registered under section 6 of the law. Indeed, before the entry into force of the first Directive, national regulation frameworks for Payment Services Providers were disparate as in some countries they were regulated under the same legislation as Forex Bureaus. Thus, in some of the observed countries Forex Bureaus are registered under section 6 of the appendix of the law, even though they are not active in remittances activities, leading therefore to an overestimation of PSPs involved in remittances transactions in that same country.

On the other hand, exception made for PSPs that operate under the exemption regime, those operating under the fully-licensed scheme most of the time have also the authorizations to operate other operations (Execution of direct debits, execution of credit transfers, issuing of payment instruments,….) as provided under other sections of the appendix of the law. A typical example, among many others, is the company *Cofidis* in Belgium. It is mainly active in consumers short-time credit, but it is also licensed under section 6 of the appendix of the law, though it not active whatsoever in remittances activities. So is the case for many others PSPs across Europe. It turns out therefore that PSPs that require a fully licensed for any of the other activities under sections of the appendix the law, tend to also request authorization for remittances activities (under section 6 of the appendix) as an *incidental* process. As the requirements to get authorized for others activities mentioned on the appendix of the law are more restrictive than those for the remittances activities[16], the applicants strive to *kill two birds with one stone* and include the remittance activities in the license request even if they don't carry out remittances transactions. As a result therefore, statistics on the PSPs that really and effectively dealing with remittances activities tend to be overestimated.

[15] We explained also under section 1.6 the main reasons that led to declining outward remittances flows from Spain

[16] Also the capital required for other activities is higher (50,000 or 125,0000 Eur depending on the activity) is higher than the funds required for the remittances activity (20,000 Eur)

3.3 The End of the proportionality principle ?

The Second Payment Service Directive has established again the Proportionality principle whereby the competent national authorities/regulators shall adopt a risk-based approach and take into consideration the nature and the size of the transactions that the applicant intend the conduct while scrutinize the applicants requests. Although PSD 2 lowered the threshold compared the first directive[17], the move intends to enable small but innovative payment institutions to be able to operate while the regulator adopts a scalable process. A direct consequence of the exemption regime however, is that the payment institutions can operate only in the country it has been licensed and cannot benefit from the freedom to provide services (European passport) unless it complies with the full license requirements. As far as the remittances operators are concerned, small payment institutions that want to operate within limited corridors (receiving countries), can use the exemption scheme as a stepping stone prior to mobilizing funds and upgrade with a full license.

Nonetheless, only six among the fifteen countries observed have small payment institutions registered and among those six, only five deal with remittance activities. In some countries, Belgium for example, while upgrading all the PSPs in conformity with PSD 2, the exemption scheme was removed and all the existing exempted payment institutions (including and especially those involved in the remittances activities) had to comply with the full license requirements or have been revoked. UK remains a notable exception with the highest number of small payment institutions registered, and where some of them which were initially exempted operators, are now online global service providers[18].

We are of the humble opinion that, by choosing to transpose PSD 2 by the most restrictive way, countries like Belgium and others that have canceled the exemption regime, have *de facto* chosen not to take into account the proportionality principle. And yet, we deem the proportionality principle as a cornerstone of the de-regulation process when it comes to remittances providers. Much as the technological innovation, more exempted remittances payment providers, as a result of a more proactive policy to encourage small operators, might be instrumental in reducing the costs of remittances.

[17] PSD 1 provided that a PSP could be exempted if the annual amount of transaction didn't exceed 3 million eur, whereby PSD 2 has lowered the threshold, at least for Electronic payment institutions, to 1 million eur

[18] World Remit for example.

IV. AML/KYC regulations & Banks de-risking

4.1 FATF Recommendations & EU AML measures

The Financial Action Task Force (FATF) is an inter-governmental body that was set up by the Group of Seven (G-7) in Paris in 1989 with the mandate to examine and develop measures to combat money laundering (FATF, 2019). Over time, the mission the FATF has evolved but the overarching goal in watermark has been to devise tools and policies to combat laundering, terrorist financing and other threats that could endanger the reputation and the integrity of the international financial system; and promote adoption by its members of legal, regulatory and operational measures aimed at implementing those policies. Shortly after its inception, the FATF issued forty recommendations and nine special recommendations, which are revised on a regularly basis and are intended to be of universal application, that are recognised as the international standard for combating money laundering and the financing of terrorism and proliferation of weapons of mass destruction[19]. Anti-money laundering legislation of the member states of the European Union stems from those recommendations. Recommendation number fourteen stipulates that countries should take measure to ensure that any person/entity, and their agents, that provide *money or value transfer services (MVTS)* is licensed or registered and subject to effective compliance and monitoring. The FATF also recommend to apply appropriate sanctions for a person/entity that carry out money or value transfer services without proper authorization. The FATF has also established the *Risk-Based Approach* principle, basis of the proportionality principle, which recommends that the resources and efforts deployed to enforce the measures meant to prevent and mitigate money laundering are commensurate with the risks identified.

So far, European union has enacted five Anti Money Laundering Directives and set up a Committee of Experts on the Evaluation of Anti-Money Laundering measures and the Financing of Terrorism (MONEYVAL), an independent monitoring mechanism within the Council of Europe with the specific task of assessing compliance with anti-money laundering international standards, ensure effective implementation and recommend needed improvement to national authorities[20].

The European commission has since 2017 published two supranational risk assessment reports which clearly mention Money Transfer Services that use cash still pose a significant, whereas for the Fintech (in which category most online remittances providers are included), may pose bigger risks if customer due

[19] www.fatf-gafi.org
[20] www.coe.int

diligence and transactions monitoring are not conducted efficiently across all network and delivery channels (European Commission, 2019).

Notwithstanding the Risk-based approach principle, national regulators claim they should not apply the proportionality principle when it comes to fight against money laundering and terrorism financing and licensed financial intermediaries, be them small or large corporations, are scrutinize equally. Anti-money laundering regulations are seriously enforced by national regulators as financial intermediaries not only face large amount of penalties in case of infringement, but managers of the company can face criminal charges. In this context, a growing number of banks are choosing to restrict or terminate relationships with remittances service providers and money transfer operators, as the nature of their activities deemed to present a higher risk of money laundering and terrorism financing. Rather than *managing* the risk involved with this category of clients, the banks prefer to *avoid* the risk : A phenomenon refers to as *De-risking*

4.2 De-risking behavior from Banks

In October 2015, at the request of the G-20 Global Partnership for Financial Inclusion (GPFI) and the Development Working Group (DWG), the World Bank Group conducted a survey on de-risking focusing, among other things, on Money Transfer Operators (MTO) account access (World Bank Group, 2015). Though the observation sample was limited[21], the report pointed out that MTOs and remittances companies are the most affected by De-risking behavior and the increasing account closures, followed by small correspondent banks and small exporters. The main drivers for the account closers, as explained by the banks themselves, are : (i) Profitability, (ii) Pressure from other actors like correspondent banks, (iii) Lack of confidence in MTOs' anti money laundering procedures and (iv) Reputational risk. Another finding of the report that need to be emphasized on, is the *asymmetric* view on the effectiveness of supervision of the remittances sector, whereby 85% of the regulators that responded affirm that they believe banks can rely on adequate supervision of the MTO sector, while only 48% of the banks that responded felt they can rely on MTO supervision to have an informed view of the risk profile of the remittance operator /MTO before opening or maintaining an account (World Bank Group, 2015). The International Finance Corporation noted that de-bankig of MTO seems to be a global problem and is even getting worse (International Finance Corporation, 2016).

An economic approach to evaluate the impact of AML/CFT regulations by McGough and Fullenkamp (2016) recalled that De-risking typically occurs in high-risk, low-profit circumstances and entails a negative effect on financial inclusion. Though remittances can be a lifeline for many people back to the country, as

[21] 110 banking authorities, 20 large banks and 170 smaller local and regional banks.

highlighted in previous section, regulators in many jurisdictions had chosen to prioritize the fight against money laundering and terrorist financing in the trade-off – a lifeline versus AML/CFT concern. Though there has not been a comprehensive study on the effects of de-risking on the cost of remittances, observations by the World Bank (World Bank Group, 2015) clearly indicated some cost increase trends in countries where de-risking is more acute. As an example, using the Remittances Price Worldwide (RPW) database, the study highlights that sending money to several African countries has become more expensive in all or in the majority of the sending countries monitored. Furthermore, with small remittances being driven off the market, or diverted into more informal channels, by de-risking strategies devised by banks, there is real risk that the remittances sector might slowly shift back towards a kind of oligopolistic market.

V. Conclusion

Remittances are driven by human migration and has always been part of human history. The industry met its large success when Mexican migrants working in USA (and a great number of them being illegal) was sending money back to the country. In essence, one would say that the sector suffers from the *original sin syndrom*e, though proper regulations progressively put in place to ensure consumers protection and the integrity of the financial system as a whole.

This paper strived to analyze to what extent the technology and innovation in the European payment systems, induced by the European policy makers to open the payment market to broader competition, has had an impact on cost of remittances towards Africa, with a focus on four African countries.

While there is no doubt that the de-regulation of the European payment market and implementation of the SEPA had benefited the consumer, as a result of greater competition, remittances remained the *lame duck* of the regulatory overhauls that have been carried out so far. The first and the second payment Directives have taken care of the different specificities of the Payment Service Providers. And yet, notwithstanding a notable exception of UK, we are of the opinion that regulators have fallen short of innovative ideas as far as remittances operators are concerned, and adopted a one size fits all & uniform approach on remittances service providers. The removal of the small payment institution statute, for remittances service providers, in some observed countries is an illustration.

Banks affirm remittances is a high risk-low profit sector, and are not always confident on the capability of supervision of this sector by the regulator. Still, the latter will hold banks accountable, and apply heavy fines, shall a compliance issue arise. Thus, the banks have adopted a de-risking strategy and many small remittances operators are driven off the market. Against this background therefore and in current circumstances, there is little hope that customers in the sending countries will enjoy a sustainable decrease trend of remittances fees while sending to sub-Saharan African countries.

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