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International Regulations and Financial Inclusion:

Between Dead-End and Renouncement

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Banking services for individuals, businesses and even sovereign states have existed in various forms for thousands of years (from Sumerian times in Mesopotamia, 24 centuries BC[1]). To achieve this, financial institutions have had to rely on risk measurement tools which, for a very long time, were based on subjective analyses carried out by bankers with access to privileged information. This data on the characteristics of their client, often a borrower, were based on reputation, leverage[2], volatility of profits for the company and, most often, the existence of collateral in the event of default. This highly selective approach was certainly at the origin of the old popular saying, "you only lend to the rich and powerful."

1. Like the Code of Hammurabi, an example of a loan with interest (Babylon 1555 BC).
2. Debt in relation to an individual's or company's own resources.

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…/… As surprising as it may seem, a more objective attitude towards risk, particularly credit risk, is a recent development. From the Industrial Revolution in the beginning of the 19th century up until the Great Crash of 1929 the financial system experienced a steady growth. After the 1929 crash, governments adopted global regulatory measures, such as the Glass-Steagall Act[1] in the United States, to better combat or control the systemic risks associated with the speculative activities of institutions. From the time of the Great Depression onwards, the banking environment has become increasingly regulated at national, regional, and now global levels.

Banking Sector Regulations on Credit Risk and AML/CFT

In a 1997 article, Ed I. Altman and A. Saunders trace the development of a more modern measure of default risk back to the 1970s. It was during this period that sophisticated assessment models were developed and adopted for retail banking[2] and corporate lending,[3] while pricing tools for these risks, both on and off the balance sheet, were standardized (RAROC).

It was also in the 1970s that financial deregulation began to spread, first in the United States and then to other developed economies. As systemic risks and contagion effects were becoming a cause for concern, the central bankers of the G10 countries decided to create the Basel Committee on Banking Supervision (BCBS) in 1974 to formulate recommendations and, later, regulations to be applied globally to banking systems, even those of other countries not included in the G10.

Over the last 50 years, the best experts have provided a considerable amount of analysis and recommendations at each stage of the Basel I, II, or III processes and their associated pillars. For the purpose of this paper, we will keep in mind the growing importance for regulated banks of having tools for measuring risk – particularly the risks of borrower default – and the penalties they incur if they do not have them or if they do not use them correctly.

Credit risks are, however, not the only risk. Indeed, participants in the international financial system operate through "identified accounts" in different jurisdictions. And to carry out these activities, sometimes cross-border, the banking system requires an infrastructure capable of handling two types of flow associated with these accounts, one flow of an informational nature on the accounts to be debited/credited, and another one of a transactional nature initiating the actual transfer.

International payment systems rely on specialized players, known as trusted third parties, to process each of these flows (such as SWIFT[4] or SEPA[5] for information and the various networks of local or international banks for payment transactions). Finally, these different flows must themselves be subject to a series of rights and obligations linked to the countries of exchange, the currency exchanged, and even the type of financial or banking product behind the underlying transaction.

1. The *Glass-Steagall Act* is another name for the 1933 *Banking Act* in the United States which establishes :
   1. the incompatibility between commercial banking and investment banking;
   2. the federal system for insuring bank deposits;
   3. the cap on interest rates on bank deposits (Regulation Q).
2. Fair Isaac was founded in 1956 as one of the first analysis companies offering credit evaluation services to individuals in the United States. Its well-known FICO score (ranging from 300 to 850) is used as a key decision-making tool by financial institutions, insurers, public utility companies and even employers.
3. The first corporate credit rating models go back to the late 1960s with Edward Altman developing his well-known Z-score model for default prediction, which is still used to this day in Bloomberg reports as a default risk benchmark.
4. Thanks to the SWIFT network, a global provider of secure financial messaging, it is possible to make transfers in foreign currencies (outside the SEPA zone) throughout the world. In short, SWIFT is the main global messaging system used by banks and financial institutions.
5. With the SEPA network, it is possible to make credit transfers, in euros only, within the European Union; however, the SEPA network also covers the United Kingdom, the four countries of the European Free Trade Association (Iceland, Norway, Liechtenstein, and Switzerland), as well as four micro-States (Andorra, Monaco, San Marino and the Vatican).

Correspondent banks[6] find their justification in this international transfer of money between jurisdictions. The activities of these institutions, known as correspondent banking, are naturally subject to the rules imposed by the financial authorities on money laundering and the financing of terrorism (AML/CFT). But they are considered by regulators to present a high risk, particularly when they handle cross-border payments. These AML/CFT rules are detailed and constantly improved by the FATF, which sets standards that financial institutions are required to respect, at the risk of being sanctioned by their regulators. In one of its recommendations, the FATF asks of each link in the system to be able to identify and manage the AML/CFT risks for its various business or customer relationships and, depending on the nature and their assessment of these risks, the banks must implement all the necessary protective measures when they operate internationally.

The Financial Crisis of 2007/2008 Changed All That

Despite Basel, it can be said that the 2007/2008 crisis was the culmination of financial deregulation and liberalization policies implemented since the 1970s. Poor credit risk management in the US sub-prime market was the initial catalyst, while contagion effects through globalized derivatives products and markets, combined with a misappreciation of sovereign credit risks in Europe, proved to be dramatic amplifiers of the financial crisis.

Its magnitude motivated the adoption of new regulations in the form of the *Dodd-Frank Act*[7] in 2010, the acceleration of the implementation of the Basel III recommendations, and stricter accounting standards.[8] These rules, imposed on all actors in the financial system, and the measures to supervise their application were designed to preserve a financial stability considered to be a "common good." In its December 2017 report, entitled "Basel III: Finalising the post-crisis reforms", the BIS specifies the standards that banks must apply to the methods, statistical or otherwise, used to assign a borrower or facility a rating or an estimate of default (PD, LGD, EAD, etc.). This response to the crisis also included an eye on the AML/CFT procedures, whose mechanisms for monitoring the risks associated with banking and financial activities were strengthened and the penalties for institutions suspected of negligence made more severe.[9]

This desire to protect the integrity of the financial system should not, of course, be at the expense of greater financial inclusion, but that is exactly what has happened in terms of two critical aspects:

- Correspondent banking
- Credit analysis models

Correspondent Banking and "De-Risking"

Correspondent banking provides banking services from one bank (the correspondent bank) to another (the respondent bank) through the

6. It is also worth noting that, on multiple occasions, the failure of this essential link accelerated major financial crises. For example, it was through this chain that the 1930/1933 crisis, which led to the Great Depression of the 1930s, spread. The initial panic was triggered by the collapse of a correspondent bank in Nashville, Tennessee, leading to the de facto suspension of all payments for around a hundred institutions. The contagion effect then spread like wildfire and the network of correspondents finally collapsed..
7. The Dodd-Frank Wall Street Reform and Consumer Protection Act was an Act of Congress passed by the US Congress in 2010. It is the main legislative component of the reform of the financial market launched during Barack Obama's presidency in the wake of the subprime crisis: *"An Act to promote the financial stability of the United States by improving accountability and transparency in the financial system, to end 'too big to fail,', to protect the American taxpayer by ending bailouts, to protect consumers from abusive financial services practices, and for other purposes."*
8. Following the 2008 financial crisis, the IASB, in cooperation with the FASB, launched a project to address the weaknesses of IAS 39 and US GAAP, the internationally recognized standards for the accounting of financial assets and liabilities in annual financial statements since 2001. In July 2014, the IASB finalised and published its new IFRS 9 methodology, which applies to financial organizations in Europe, the Middle East, Asia, Africa, Oceania, and the Americas (excluding the US).
9. It hit the French bank BNP Paribas in 2014 with a record fine of US$ 8.9 billion and the British bank HSBC in 2013 for US$ 1.9 billion. In both cases, these fines were imposed for actions considered to be money laundering.

Nostro account (the account of the respondent bank opened in the books of the correspondent bank) and the Vostro account (the same account, most of the time, but seen from the point of view of the correspondent bank). This relationship takes the form of a bilateral agreement enabling domestic or international payments to be made (i) on behalf of the respondent bank, (ii) on behalf of several respondent banks or (iii) by transparency, giving the respondent bank's customer direct access to the corresponding account (see **Figure 1**).

For this type of relationship to be justified, the correspondent bank must not have a direct business relationship with the customer of the respondent institution. The respondent bank's customers may be individuals, companies, or financial services providers. The respondent bank then acts as a customer of the correspondent bank, which offers it various services involving participation in the process or payment of a money transfer. As well as acting as a third party in such transactions, a correspondent bank may also be involved in more complex trade or project finance transactions, clearing international payments, or cash management (short-term investment or borrowing). Development aid naturally makes use of all these services.
Correspondent banks therefore enable all banks everywhere to carry out international monetary transactions for their customers, whether they be private individuals, companies, or institutions, particularly when they require transactions in foreign currencies. They play the critical role of intermediary between the exporter in a given jurisdiction and its importer or, for individuals,[10] of remittance[11] transfer operator.
Although today this function is often performed by very large financial institutions, it has existed for centuries in various forms, depending on the geography. Economic analysts know the names *Hawala*, *Hundi* or *Fei-chen* as informal systems that have been carrying out this type of money transfer for a very long time (see **Figure 2** on the next page).

Correspondent Banking Impacted by the 2008

Since the 2008 crisis, and while the number of banks has increased worldwide, the number of correspondent institutions has fallen very significantly, and in some regions this decline is still continuing today. 75% of so-called 'global' banks had already withdrawn from this activity by 2016, and 60% of 'local' banks, for which the function is essential, were complaining about a decline in the number of their counterparts. As we can see in the figure below, while overall volumes in circulation are increasing, the number

10. According to the World Bank, in 2020, these migrant remittance flows exceeded US$ 530 billion.
11. Money transfers from migrants to their country of origin.

Figure 1 | Source : IMF Staff Discussion Note (2016) «The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action», IMF, June.

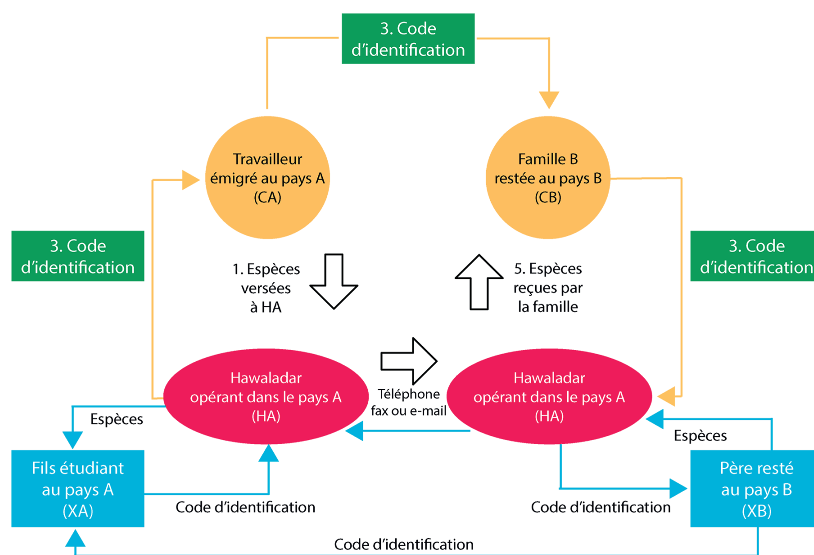


Figure 2 | Source : El-Qorchi M. (2022) « Hawala Comment fonctionne ce système informel de transfert de fonds et faut-il le réglementer? » Finances & Développement, IMF, Décembre.

of active[12] correspondents is decreasing significantly. Between 2011 and 2018, the number of these correspondent institutions decreased by 20%. Surveys carried out by the major international institutions highlight the significance of this phenomenon for small and medium-sized exporters, small domestic banks, trade and project finance[13] players, individuals, and for all international clearing activities in general (see **Figure 3** on the next page).

How Can We Explain this Decline?

In response to the 2008 crisis, the various regulators strengthened AML/CFT procedures and increased the sanctions for institutions suspected of negligence.[14] The banking and financial systems have had to adapt their structures and human resources and put in place the necessary tools, training, and controls, automatically increasing the cost of acquiring and monitoring customers.[15] These increased costs, as well as the subjectivity of rules deemed to be "too open to interpretation by the regulator" or simply not clear enough, are reasons often cited by banking players to justify the withdrawal of certain banks from correspondent banking activities.

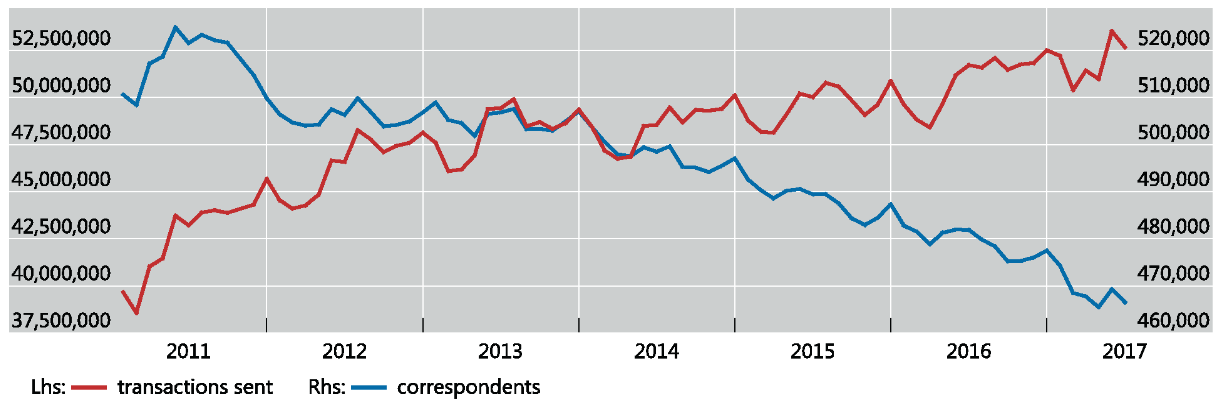
In doing so, they prefer to sever business relationships in certain regions or with certain types of customers. This is "de-risking," the perverse effects that the FATF has observed, with many entities, including some highly emblematic ones,[16] choosing to avoid rather than manage these AML/CFT risks. It is precisely to put a stop to this drift that, in 2015, the FATF sought to clarify its position and launched an initiative aimed at better understanding the impact of this dangerous trend.

What Dynamics Are We Really Facing?

Controlling these AML/CFT risks requires regular, in-depth, and systematic analysis of the end customer for each banking transaction, includ-

12. Active correspondent is counted per corridor. An active correspondent on several corridors is therefore counted several times.
13. Trade Finance covers the specific tools used to finance a commercial transaction between two companies, while Project Finance covers the tools used to finance a project.
14. This hit the French bank BNP Paribas in 2014 with a record fine of US$ 8.9 billion and the British bank HSBC in 2013 for US$ 1.9 billion. In both cases, these fines were imposed for actions considered to be money laundering.
15. These costs have not stabilized and have continued to rise directly or indirectly in recent years.
16. This attitude is dramatically illustrated by Barclays' decision in May 2013 to abruptly sever its correspondent banking relationship with Dahabshiil, the main organization for transferring remittances between Somalia and the UK.

Figure 3 | Number of active correspondents over all corridors (three-month moving averages)



Sources: SWIFT Watch; National Bank of Belgium.

ing the emblematic KYC procedure.[17] Regulators have made real efforts in recent years to clarify their expectations in this area, particularly those of the US regulator. But these rules are constantly evolving, and despite this educational effort, they still leave plenty of room for interpretation, naturally pushing financial institutions to be overly cautious.

In addition, the scale and extraterritorial nature of the financial sanctions imposed (and even the criminal sanctions imposed on directors of the institutions involved) have increased the attention paid to this issue and contributed to weakening the sector. This is particularly true of the aggressive attitude of the US authorities if the characteristics of the transaction (use of US$) or the activities of the respondent institution expose it, for example, to the possibility of revocation of all or part of its banking licences in the United States. According to the FSB, between 2011 and 2016 for corridors to and from the US dollar or the euro, the number of players, as measured by the number of information flows on the SWIFT messaging system, fell by 15% (even though these two currencies account for 80% of SWIFT flows).

In reaction to these risks, banks have developed their own adaptive mechanisms, most often resulting in strategic decisions on small transactions, those involving international transfers of individuals or trade or project finance activities whose intrinsic profitability is low given the capital they use[18] and the nature of the associated risks. In the case of the largest banks, this adaptation can go as far as ending relations with the corresponding institutions, or even taking the more strategic and impactful decision to completely cease or sell their activities or subsidiaries in jurisdictions identified as exposed to this type of risk (and where short- or medium-term profit expectations do not justify taking on this risk).

Disproportionate but Poorly Measured Impact on the African Continent

This drift naturally affects the riskiest activities and customers (AML/CFT) or those with low profitability in relation to the capital consumed, or with limited profit prospects. It shows no sign of abating, at least for the most vulnerable jurisdictions in developing countries, particularly in Africa. According to BIS figures, in 2017 around 30% of the world's population still had no access to payment services, and in many cases more than half of the inhabitants of certain African

17. Or, according to the interpretation of the recommendations of the American authorities, a KYCC, Know Your Customer's Customer.

18. Correspondent banking activities, which are characterized by high volumes of transactions but relatively low returns and often high capital consumption (due to stricter prudential standards following the 2008 crisis).

countries (a continent where only seven countries have a penetration rate of more than 60%). It is true that some pan-African players have seized the opportunities offered by the closure of these "international" correspondent banks, resulting in spectacular growth in their turnover. Unfortunately, this has not eliminated the underlying problem, because these banks, whose capital is usually international, are subject to the same pressures and sanctions, and are therefore just as constrained in their ability to settle transactions in US dollars (or even euros), whereas the continent's import/export flows are mainly associated with trade in raw materials usually denominated in US dollars.

What appears to be a drift is a serious problem for the international community, which, in FATF's own words, "may lead to financial exclusion in certain regions or countries, less transparency of flows and potentially, as a knock-on effect, greater vulnerability to the initial risks of money laundering and terrorist financing." This reduction in the number of correspondent institutions, while overall volumes in circulation have increased significantly since the 2008 crisis, means consolidation, and therefore concentration, of correspondent banking players, with the inevitable mechanical effect of increasing the price of the services they offer.

Alternative solutions have sometimes been put in place by financial institutions to fill this gap and ensure the circulation of certain flows. For example, trade and project finance activities are increasingly using risk-reducing tools (letters of credit/documentary credit[19]) to offset international payments in foreign currency. These tools use international banks (particularly for the fast-growing Sino-African activities), usually US banks, whose creditworthiness makes this guarantee mechanism possible. But bypassing the foreign currency payment corridor, more exposed to sanctions, comes at the price of concentration on a small number of players and, here again, a worrying risk of dependence on their commercial policy.

The risk is all the greater because the implementation of these alternative solutions is often the result of choices made by private entities whose primary objective is fiduciary in nature. These choices are linked to the economic interest of the corridor or the target customer base, the relative cost of the service and its profitability, or even, in a very binary way and, given the extreme concentration of players, the risk of stability that the country or region may present. Unsurprisingly, the richer corridors are then perpetuated and those serving poorer countries or jurisdictions, or those perceived to be more unstable, are abandoned, or have dissuasive intervention costs.

In this case, the prospects are bleak for the countries or regions concerned, because the situation has or will inevitably have an impact on financial inclusion and intermediation, and consequently on the long-term growth prospects of their economies. This is undoubtedly a sign of fragility, clearly picked up by the rating agencies (Moody's Confirms Guatemalan) which, by making the link between the reduction in the number of corresponding institutions and the increased financial fragility of the country or borrower, then contributes to increasing its financing costs on the international markets and with lenders.

The main international institutions have been monitoring the phenomenon for some years now. In 2015, the World Bank expressed concerns about the decline in the number of corresponding institutions, and the IMF,[20] in 2016

19. A letter of credit is an agreement issued by a bank, in which the bank agrees to guarantee payment on behalf of the buyer, if the conditions of the agreement between buyer and seller are met. A letter of credit is also known as a documentary credit.

20. In 2017, in a case study dedicated to these countries, the IMF highlighted the effects of this contraction on Fiji, Tonga, and Vanuatu. Together with the World Bank, it points to the geographically specific nature of these effects, particularly in the Caribbean, the small countries of Europe and Central Asia, the Pacific Islands and, of course, the African continent. Liberia, for example, saw the number of its correspondent institutions halved (from 75 to 36 between 2013 and 2016), as did Sudan, where the contraction took place between 2012 and 2015.

and again in 2017, noted that in this phase of concentration, the redirection of migrant remittance flows to other players was accompanied by an increase in transaction costs and a decline in the number and quality of services offered, thus triggering even more concentration.

In this latest 2017 IMF report, the focus is put on the disproportionate impact of this contraction on the countries of the South as a whole, with a very visible increase in transfer fees for East Asia, the Pacific, the Middle East, and the African continent as a whole. This is even more disproportionate for money transfer specialists (MTOs[21]) and charities, which are deemed to be high-risk, low-reward customers for the corresponding institutions. As these activities are only profitable for large volumes, in this context of player attrition, the increase in prices and the reduction in transfer channels will have a greater impact the smaller the State is.

As an example of this phenomenon, in a study carried out in the United States in 2017, the authors note the increasing difficulty of access to banking services for non-profit institutions in the United States. Among other things, this situation is causing delays in money transfers, excessively high fees, account closures and, even worse, refusals to open accounts. And this is the United States!

Ironically, the tightening of regulatory constraints imposed on banks in order to (i) make the global financial system "safer and more robust" and (ii) better protect individuals, is ultimately having a direct impact on the most vulnerable countries and populations, whose momentum towards financial inclusion has clearly been slowed.

Perhaps even more worryingly, this approach and its effects could lead (and are already leading!) players to continue, or even intensify, their use of informal networks, which are inevitably more opaque, making AML/CFT policies much less effective. Argentina, for example, recently announced that it would pay for its Chinese imports in yuan rather than dollars, a decision that, according to its government, will benefit the country's economy. Brazil took a similar decision at the end of March, concluding an agreement with China to conduct all their trade in their own currencies.

Credit Risk in Developing Countries

Fintechs – Established Players

Over the last twenty years, the emergence of fintechs, whose development and growth are linked to the internet and its disintermediation capabilities, has dramatically challenged the traditional banking model. In this sector, online credit platforms offer their services to their customers without, or with a reduced number of, intermediaries. "Social" marketing was certainly a driving force behind the media coverage of the fintech world, but the underlying reasons for their development are much more concrete, as they offer (i) lower transaction costs (fewer intermediaries between lenders and borrowers) and a quicker service of better quality for both parties, (ii) more universal credit assessment models, and … iii) a response to the 2008 crisis.

Indeed, after 2008, the reduction in P2P "intermediary" costs has benefited from technological innovations and the absence of costly pre-existing structures for these players. At the same time, banks were spending considerable sums to adapt themselves (and their branch and agency networks) to tighter procedures and regulations. While fintechs were offering ever-lower transaction costs, banks had no choice but to pass on their ever-increasing structural costs to their customers.

With fintechs, the emergence of more sophisticated classification techniques using artificial intelligence and machine learning, such as neu-

21. https://blogs.worldbank.org/peoplemove/closing-bank-accounts-money-transfer-operators-mtos-raising-remittance-costs

ral networks, [22] support vector machines,[23] and random decision forest,[24] has led to various in-depth comparative studies aimed at improving default risk assessment models in terms of statistical performance. At the same time, as banks and more traditional lenders have become more reluctant to grant credit to borrowers, particularly those who do not meet the new (or simply stricter) risk criteria, P2P lending platforms are emerging as alternative lenders, willing to take on this risk on the basis of their own default risk analysis model.

Changing Regulatory Regimes for Fintechs Can Help or Hinder the Development of the Sector

Specific regulatory regimes for P2P have been put in place and vary considerably. Their differences shape the profiles of the respective local P2P footprints. To quote the three main P2P countries – the UK, the US, and China – and some key features of these rules, the UK is the only one to have put in place regulatory sandboxes,[25] to allow new entrants to experiment without being overwhelmed by burdens at the start of their growth (this was also the approach taken by the Kenyan regulator when M-PESA was launched by Safaricom).

Banks need relevant, historical data, which they generally obtain by serving their customers for years (with human interaction), accumulating what can be considered proprietary information. This information asymmetry has historically been a determining factor in the banking sector, as it gives institutions a significant advantage in credit knowledge. But when they have critical mass, P2P platforms can reduce this asymmetry. By their very nature, they are a network of lenders and borrowers whose information, gathered by organizing and monitoring this network, can be used to improve their assessment of credit risk.

In favor of wider integration of financial markets, regulators have gradually worked to reduce this asymmetry between banks and fintechs, as specialist lenders. In fact, in 2016, the European Union adopted the revised Payment Services Directive (PSD2), in order, amongst other goals, to “further level the playing field for payment service providers by including new players.” With PSD2, member states must ensure that their payment service providers do not block or hinder account information services and the use of payment26 initiation for their customers.

In this favorable environment, the number of fintechs has grown rapidly since 2008, but while the growth rate in recent years has been impressive, the volumes processed remain limited. In the UK, the first market to open up to P2P lending27 in 2005, volumes have grown steadily, even doubling every year between 2012 and 2015, but the base was very small and in 2015, the stock of loans still only represented £2 billion out of a total UK market of £523 billion (i.e., just 0.4% of the market). However, in the UK the momentum is strong and in 2015 alone, P2P platform lending activity accounted for almost 5% of total lending in the country, with an impressive 12.6% for SME lending.

Credit in Developing Countries: The Case of Sub-Saharan Africa

When it comes to credit analysis, the specific characteristics of developing countries have been neglected. The standards applied are clearly dictated by and for the economies of developed countries and are based on models and data adapted to these financial environments in a globalized world. In this standardized configu-

22. A neural network is a group of interconnected nodes, based on a simplified model of the brain’s neurones.
23. SVMs are supervised learning models with associated learning algorithms that analyse data for classification and regression analysis. SVM are a generalization of linear classifiers.
24. Random Forest is an ensemble learning method for classification, regression, and other tasks that operates by constructing a multitude of decision trees at training time.
25. These are systems for testing and supporting new financial services or business models in real-life conditions; they are subject to special, often lighter, oversight and supervision.
26. Payment initiation (PIS) is a service enabling an individual (or a company) to order a payment transaction such as a transfer, from a website or mobile application that is not necessarily that of the bank where their bank account is held.
27. Zopa, first P2P, launched in 2005.

ration, to analyze their credit risks, banks have the choice of opting for an internal default risk analysis system (IRB) or using a standard, less sophisticated system that is available and validated ex ante by the major international regulators. However, in developing countries, and even worse in the LDCs, particularly in Africa with its dominant informal economies, the difficulty and high cost of collecting "traditional" data is a structural element that prevents a proper assessment of risk and restricts the supply of credit and/or increases the use of capital. It is also a seemingly insurmountable obstacle to the development of their own risk analysis model. Local banks are therefore "condemned" to using this standard model relying on the existence of a rating agency, even though most developing countries do not have one at the national level and international agencies still rate too few African companies.

The situation is even worse for credit to SMEs. Wang (2016) conducted a study using cross-country data from the World Bank Enterprise Survey in 119 developing countries. It examines the main factors that can explain the viability of SMEs in developing economies, where local firms are very often small, and access to finance is the main determinant. In Kenya, one of the most technology-friendly economies on the African continent, development and job creation require better access to finance for Jua Kali[28] which account for almost 98% of Kenyan businesses.

More generally, while in South-East Asia the credit/GDP ratio is 172%, it falls to 60% in Latin America and 15% in West Africa. The situation is even worse, with only 12%, in the group of Central African countries where, at the African Banking Forum in Abidjan in February 2023, CEMAC President Daniel Ona Ondo openly regretted the low overall volume of credit, which is too insufficiently directed towards the private sector for it to finance the economy.

In 2016, the FSDK, under the aegis of the World Bank and the Central Bank of Kenya, estimated that loans to Kenyan SMEs accounted for 25% to 30% of the total loan portfolio of the banks surveyed. By way of comparison, in 2013, in East Africa, the percentage for Kenya was just under 23%, but that compared favorably with 17% in Rwanda, 14% in Tanzania and just 8% in South Africa. In the same year, in Nigeria, West Africa's largest economy, SME lending did not exceed 5% of the total loan portfolio.

Under pressure from fintechs, traditional credit activities[29] have had to and continue to adapt to the digital world and current standards of modernity. MFIs, historically under pressure from banks, must now invest time and resources in automating at least part of their credit scoring to reduce the cost of analysis, enable faster credit decisions, and make it easier to follow up on existing customers.

Fintechs, which in Africa are capitalizing on the digital boom and its "leapfrogging"[30] characteristics, are very popular. They promise to address model and data issues to combat the stagnation of financial inclusion in sub-Saharan Africa. Unfortunately, the clear success of M-Pesa in Kenya remains an exception.

While they are a driving force for change, they have been slow to penetrate new markets and countries because we often forget that this model depends massively on digital infrastructure (cables), access to electricity, and the number and availability of telecoms and internet service providers. Yet, in most sub-Saharan African countries, this infrastructure base remains underdeveloped. In addition, as mentioned above, the supply of bank credit to SMEs has historically been very limited, so the gamble of creating such an offer seems very risky, even for established players (M-Pesa's credit activity is strug-

28. Swahili word, meaning hot sun, given to the roadside businesses in the country.

29. Like the Tontines in Central Africa, which are based on traditional loan approval processes and offer what might be called a single guarantee in the form of a "social and solidarity-based" safety net.

30. Accelerate development by skipping inferior, less efficient, more expensive, or more polluting technologies and move directly to more advanced ones.

gling to convince). Also, in contrast to developed countries, very few African fintechs31 have focused on credit, most of them being more interested in cross-border payments, and when they have, they have focused more on credit to individuals such as microcredit, particularly in Kenya, Nigeria or South Africa, where activity, although growing rapidly, remains limited.

To Conclude

Dead-End

In March 2021, the EBA also alerted its members to the issue in an attempt to stem the de-risking drift. It pointed out that "compliance with the anti-money laundering and combating the financing of terrorism (AML/CFT) obligations laid down in EU legislation does not compel financial institutions to refuse or terminate business relationships with entire categories of customers that they consider to present a higher risk of money laundering and terrorist financing" and adds that, because of de-risking, "customers may thus find themselves deprived of access to the financial system. De-risking can be a legitimate risk management tool in some cases, but it can also be a sign of ineffective management of money laundering and terrorist financing risks, which can have serious consequences."

The desire to protect the integrity of the financial system should not be at the expense of greater financial inclusion, which is so highly dependent on cross-border payments in developing countries. In the words of Jack Lew,[32] "This is not a conflict of interest, it is a need to bring together two parallel interests." Concluding its 2017 report, the IMF, is pointing to this situation and lists the multiple effects of de-risking on the essential parameters of development policies, which are affected in one way or another and often cumulatively. We are talking here about the development and growth prospects of the most vulnerable countries.

It is this observation that the development community should seize upon to break out of what appears to be a deadlock. Surprisingly, however, it is rarely the entry point for current development studies. This is certainly the case because of a lack of data (although there is a lot more nowadays). An additional reason, perhaps, is that the subject is eminently political in our northern countries, which cannot be blamed for seeking to protect themselves from the risks of money laundering and terrorist financing.

Finally, although there are notes on this subject, there is still a need for advocacy of sub-Saharan Africa, which could help to clarify the situation on the continent and assess the phenomenon in terms of the vulnerability of different countries as well as envisage solutions based on case studies. For example, the use of blockchain in connection with the development of fintechs is opening up unconvincing prospects for the time being, as are certain ideas suggesting the intermediation of public entities to take on this role when the situation so requires. The IMF has also sometimes been mentioned as a possible player in the remittance chain. In fact, it is mainly migrant remittances, the activities of non-profit organizations and MTOs that are the subject of the liveliest debate, leaving the issue of financing and supporting the development of SMEs dangerously to the side – particularly as de-risking, through rating agencies contagion effect, has a real potential to undermine the development of SME lending in countries on which economic development and the labor supply depend.

The Wrong Direction

The emergence of fintechs in developed countries may have given the impression of being an immediately available solution to the challenges facing developing countries, particularly in Africa. Hopes were high for SMEs, but the results

31. Another issue worth examining is that of the capital financing the development of fintechs. Very little of it is African, and most of it comes from developed countries.
32. Jack Lew, U.S. Treasury Secretary, notes that these efforts should not be mutually exclusive.

highlight limitations as diverse as infrastructure, the regulatory and legal framework, data security, pricing, internet coverage, rural electrification, and support for mobile money operators.

In addition, a detailed analysis of their development in sub-Saharan Africa shows that, in order to operate in these territories, they need the involvement of a large number of players (banks, financial institutions, telecommunications operators), without which they do not appear to be a credible response to the need for financial inclusion. fintechs, like microfinance, will offer more and more services and cover more and more customers. They will not, however, offer a credible response (other than a complementary one) to the lack of credit available to SMEs in the near future.

So how can we meet the critical challenges of greater financial inclusion and faster development of a solid credit market for SMEs? Technological advances (which are behind the development of fintechs) could contribute in another way as well. Indeed, certain obstacles to greater financial inclusion are common to all financial players, such as (i) the difficulty of accessing the data needed to analyse a company's default risk, (ii) the controllable nature of the financial data likely to be used, and (iii) the choice of strict and restrictive regulations favoring an analysis model based on this data alone.

The Right Direction

The real and essential contribution of fintechs has been to develop a wide range of alternative models for measuring default risk. Their desire for universalism has pushed them very far in this direction, moving away from the banks' standard approach and leading to the use of a host of new data in their models to improve default risk analysis. Models for credit to individuals have been tested and successfully deployed by fintechs, which in fact account for most of the sector's growth in Africa. This dynamic has also had a strong influence on the banking world, where credit analysis teams are increasingly made up of data specialists, illustrating, if necessary, the porous nature of practices in a rapidly changing environment.

For African SMEs, we therefore need to find the best possible combination of financial *data and* alternative data (big data of different types and origins) with the same predictive power, for assessing the risk of default, as those used by banks and their traditional credit analysis model, as validated by their national regulator.

If this alternative model exists, it will have to be accompanied by a specific methodology adapted to the different data choices. It will probably be sector-based, so as to be able to support the development of business activities in countries whose economies are still fragile and not very diversified, covering SMEs linked to agriculture, mining, manufacturing, etc. The regulator will then have to choose between the classic, globalized approach adopted and recommended by developed countries and a tailor-made approach using specific combinations of data and appropriate models.

This second path is a paradigm shift that will require a new doctrine and the acceptance of no longer aligning with the current globalized approach. Regulators on the African continent will have the opportunity to demonstrate their true independence in the pursuit of financial inclusion for SMEs and job creation. They could also set up regulatory sandboxes to allow new models to be experimented with in the early stages of their growth.

The international community will then have to decide whether to support this movement, which will inevitably have an impact on developed countries and their own banking industry.[33]

33. Already facing major challenges of a similar nature, such as fintechs, standardization of branchless banking and big data.

Acronyms

- BNP: Banque nationale de Paris
- BIS: Bank for International Settlements
- BCBS: The Basel Committee on Banking Supervision
- CEMAC: Cameroon, Central African Republic, Congo, Gabon, Equatorial Guinea, Chad
- PSD2: revised Payment Services Directive
- EAD: Exposure At Default
- EBA: European Banking Association
- FASB: Financial Accounting Standards Board
- FATF: Financial Action Task Force, created in 1989 and based in Paris
- FDSK: Financial Sector Deepening Kenya
- Fintechs: Financial Technology firms
- IMF: International Monetary Fund
- FSB: Financial Stability Board
- GAAP: Generally Accepted Accounting Principles
- G10: Belgium, Canada, France, Germany, Italy, Japan, Netherlands, Sweden, Switzerland, United Kingdom, and United States
- HSBC: Hong Kong and Shanghai Banking Corporation,
- IAS: International Accounting Standard
- IASB: International Accounting Standards Board
- IFRS: International Financial Reporting Standard
- MFI: Micro Finance Institutions
- IRB: Internal Ratings-Based approach
- KYC: Know Your Customer and its critical version KYCC, Know Your Customer's Client
- AML/CFT: Anti-Money Laundering/Combating the Financing of Terrorism
- LGD: Loss Given Default
- LHS: Left Hand Side
- MTO: Money Transfers Operators
- Nostro: Our in Latin (Our account in the books of the corresponding bank)
- PD: Probability of Default
- GDP: Gross Domestic Product
- PIS: Payment Initiation Services
- LDC: Least Developed Countries
- SMES: Small and Medium Size Enterprises
- Project Finance: Techniques and products to finance projects
- P2P: Peer to Peer
- RAROC: Risk-Adjusted Return On Capital
- RHS: Right Hand Side
- SEPA: Single Euro Payments Area
- SWIFT: Society for Worldwide Interbank Financial Telecommunication
- VSMES: Very Small and Medium Size Enterprises
- Trade Finance: Techniques and products for financing international trade
- UE: European Union
- US: United States
- Vostro: Your in Latin (Your account in the books of the corresponding bank)

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