Policy Responses to De-risking

Progress Report on the CGD Working Group's 2015 Recommendations

Jim Woodsome • Vijaya Ramachandran
Clay Lowery • Jody Myers

Center for Global Development

Policy Responses to De-risking

Progress Report on the CGD Working Group's 2015 Recommendations

Jim Woodsome • Vijaya Ramachandran
Clay Lowery • Jody Myers

Center for Global Development

Center for Global Development. 2018.
Creative Commons Attribution-NonCommercial 4.0

Center for Global Development
2055 L Street, NW
Fifth Floor
Washington, DC 20036

www.cgdev.org

CONTENTS

Acknowledgements iv

Acronyms and Abbreviations v

Executive Summary vii

Introduction xi

1 Recommendation 1 of the 2015 Report:
Rigorously assess the unintended consequences of AML/CFT and sanctions enforcement at the national and the global level 1

2 Recommendation 2 of the 2015 Report:
Generate better data and share data to facilitate regulatory impact assessments 17

3 Recommendation 3 of the 2015 Report:
Strengthen the risk-based approach 23

4 Recommendation 4 of the 2015 Report:
Improve compliance and clarify indicators of lower risk 31

5 Recommendation 5 of the 2015 Report:
Facilitate identification and lower the costs of compliance 36

6 Beyond the CGD Recommendations 52

7 Conclusion 60

References.................... 62

ACKNOWLEDGEMENTS

We are grateful to the many individuals who shared their knowledge with us and who took the time to review earlier drafts of this report. In particular, we would like to thank Chris Calabia, Sue Eckert, Alan Gelb, Rosita Najmi, Amy Jerrett-Kotsenas, Parastou Youssefi, and staff of the US Treasury for their valuable feedback.

CGD is grateful for contributions from the Bill and Melinda Gates Foundation in support of this work. Any errors or omissions remain the responsibility of the authors.

ACRONYMS AND ABBREVIATIONS

2015 report	*Unintended Consequences of Anti–Money Laundering Policies for Poor Countries* (CGD Working Group 2015)
ABA	American Bankers Association
AML/CFT	anti–money laundering and countering the financing of terrorism
AUSTRAC	Australian Transaction Reports and Analysis Centre
BCBS	Basel Committee on Banking Supervision
BIC	business identifier code
BIS	Bank for International Settlements
BSA	Bank Secrecy Act
CBR	correspondent banking relationship
CDD	customer due diligence
CGD	Center for Global Development
CHAPS	Clearing House Automated Payments System
CHIPS	Clearing House Interbank Payments System
CPMI	Committee on Payments and Market Infrastructures
CSN	Charity & Security Network
FATF	Financial Action Task Force
FBAs	federal banking agencies (United States)
FCA	Financial Conduct Authority (United Kingdom)
FinCEN	Financial Crimes Enforcement Network (US Department of the Treasury bureau)
FSB	Financial Stability Board
GAO	Government Accountability Office (United States)
GLEIF	Global Legal Entity Identifier Foundation
GLEIS	Global Legal Entity Identifier System
HIC	high-income country
HM Treasury	Her Majesty's Treasury (United Kingdom)
ID4D	Identification for Development
IFC	International Finance Corporation

IIF	Institute of International Finance
IMF	International Monetary Fund
ISO	International Organization for Standardization
KYC	know your customer
KYCC	know your customer’s customer
LEI	legal entity identifier
ML/TF	money laundering and terrorist financing
MSB	money services business
MTO	money transfer operator
MVTS	money or value transfer service
NPO	nonprofit organization
NRA	national risk assessment
OCC	Office of the Comptroller of the Currency (United States)
OFAC	Office of Foreign Assets Control (US Department of the Treasury office)
PMPG	Payments Market Practice Group
RBA	risk-based approach
SAR	suspicious activity report
SWIFT	Society for Worldwide Interbank Financial Telecommunication
TA	technical assistance

EXECUTIVE SUMMARY

In November 2015, the Center for Global Development (CGD) published the report *Unintended Consequences of Anti–Money Laundering Policies for Poor Countries*.[1] The product of a working group comprising scholars, policymakers, market practitioners, and other subject-matter experts, the report warned that efforts to curb illicit finance were producing significant adverse side effects. Partly in response to heightened enforcement of regulations related to anti–money laundering and countering the financing of terrorism (AML/CFT), as well as sanctions, large international banks had begun exiting relationships with countries and market segments they perceived to be high in risk or else not worth the rising cost of compliance, a practice that came to be known as "de-risking."[2] These pressures sometimes interacted unfavorably with banks' changing business strategies and heightened cost sensitivity in the wake of the global financial crisis, which put further pressure on low-margin business lines and relationships. As a result of these trends, affected parties could find it harder to access certain financial services, particularly cross-border payments. This situation appeared to pose a risk to international financial integration, financial inclusion, and financial transparency—and by extension, to economic growth and poverty reduction.

Among the sectors affected by de-risking, the report focused on international correspondent banking (a type of bilateral interbank relationship that is critical to the provision of cross-border payments), money transfer operators (MTOs), and nonprofit organizations (NPOs). The report warned that the disruption of these sectors could make it harder for small businesses to secure trade finance, for migrants to send remittances back home, and for NPOs to provide lifesaving humanitarian aid abroad.[3]

The 2015 report made five sets of recommendations to stakeholders to address de-risking (Table 1). The purpose of these recommendations was to better understand the scale and scope of the problem, to clarify regulatory expectations, to improve regulatory compliance among the affected sectors and to lower the compliance burden where possible without compromising financial integrity. Five sets of recommendations were made:

- Rigorously assess the unintended consequences of AML/CFT and sanctions enforcement at the national and the global level.
- Generate better data and share data to facilitate regulatory impact assessments
- Strengthen the risk-based approach
- Improve compliance and clarify indicators of lower risk
- Facilitate identification and lower the costs of compliance

1. CGD Working Group 2015.

2. AML/CFT regulations

3. CGD Working Group 2015, 2.

The report directed these recommendations to international standard-setting bodies, international financial institutions, national government agencies, industry groups, and others.

The purpose of this new report is to take stock of what has been accomplished as well as what remains to be done. The policy response to de-risking, especially at the international level, has been commendable. International institutions—including the G20 and its member states, the Financial Stability Board, the Bank for International Settlements and its standing committees, the International Monetary Fund, and the World Bank—have all devoted significant effort to studying the problem, clarifying regulatory guidelines, supporting technological solutions, and offering technical assistance to government authorities in affected jurisdictions to help them improve their regulatory frameworks and supervisory practices. The G7 ministries of finance, often working behind the scenes, have also been integral to this effort.

Stakeholders should continue to work together to mitigate de-risking and its root causes. Progress has been made and the situation has stabilized to an extent, with no country at risk of losing access to international payments services. At the same time, the problem has not yet abated. The most recent data available, from mid-2017, indicate that the number of international correspondent banking relationships continues to decline, although the value and volume of payments sent through these networks have held up.[4] Similarly, recent reports indicate that many money transfer organizations and non-profit organizations continue to encounter financial access problems as well. In addition to the actions that are already underway, this report suggests additional measures that could augment the policy response. De-risking has exposed certain flaws in our approach to AML/CFT, but it also presents a valuable opportunity to address those shortcomings and, in doing so, to move toward a system that does more to ensure integrity and inclusiveness. Table 1 describes what remains to be done.

Policymakers are correct to focus primarily on following through on policy reforms, assessing their effectiveness, and calibrating as needed. Thanks to extensive data gathering and analytical work, the scale and scope of the de-risking problem is much better understood now than it was three years ago, although a few gaps remain, including how non-profit organizations, particularly those based in Europe, have been affected. Periodic data updates remain useful for monitoring the situation, assessing the effectiveness of policy responses, and calibrating accordingly.

Developing countries must continue to enhance their own AML/CFT regulatory regimes and supervisory practices. Developed countries and international institutions can assist in these efforts through the targeted delivery of technical assistance.

4. FSB 2018b, 1.

Table 1. Summary of New Recommendations	
Organization	Recommendation
Recommendation 1: Rigorously assess the unintended consequences of AML/CFT and sanctions enforcement at the national and the global level	
National regulators in international financial centers	Conduct comprehensive regulatory impact assessments of AML/CFT and sanctions regimes.
Research organizations	Conduct a statistically robust survey of European nonprofits engaged in humanitarian work abroad to determine the extent of their financial access problems.
FSB or World Bank	Continue to monitor the international remittances market for signs of stress due to the de-risking of MTOs. If necessary, an update to the World Bank's 2015 survey of remittance service providers should be considered.
Recommendation 2: Generate better data and share data to facilitate regulatory impact assessments	
National regulators in international financial centers and countries affected by de-risking	Implement systematic monitoring of account and transaction activities in correspondent banking, remittances (including those made through MTOs), and NPOs focused on humanitarian activities.
FSB and SWIFT	If de-risking has not abated, continue to share and analyze data regarding global trends in correspondent banking relationships and activity.
Recommendation 3: Strengthen the risk-based approach	
National regulators	Provide more training to bank examiners on how to properly assess the risks of MTOs and NPOs. Clarify regulations and bank examination manuals as appropriate to reflect a proportionate RBA.
Recommendation 4: Improve compliance and clarify indicators of lower risk	
National regulators	Continue to conduct outreach and work with affected sectors to ensure they understand regulators' expectations.
FATF	Consider whether to publish a consolidated list of indicators of lower-risk NPOs.
Recommendation 5: Facilitate identification and lower the costs of compliance	
Individual identification systems	
National governments	Lower or eliminate fees that prevent residents from obtaining IDs
Standard-setting bodies and international organizations	Explore what steps are needed to develop an internationally recognized, interoperable digital identification system for natural persons engaging in cross-border financial transactions
KYC utilities	
National regulators	Give further consideration as to whether and to what degree financial institutions can rely on third parties for customer identification and due diligence, and offer further guidance, if necessary. It is important that banks understand the degree to which they can rely on KYC utilities or other third-party information sharing mechanisms.
National regulators	Provide clarity on who bears (or is allowed to bear) liability if CDD information is incorrect
National regulators	Consider whether to establish regulatory regimes for regulating and monitoring KYC utilities
Standard-setting bodies, international organizations, industry groups, banks, MTOs, and NPOs	Work together to evaluate the utility of Wolfsberg-style standardized due diligence questionnaires for banks to use in the course of onboarding MTOs, and separately, NPOs. Such a questionnaire might help align expectations between banks and MTOs/NPOs (particularly smaller MTOs/NPOs) with regards to what information is required in order to open an account, and also to promote more consistent treatment. If there is broad consensus on the utility of such an approach, identify necessary next steps, possible information requirements, and what type of economic and regulatory support might be necessary.
Standard-setting bodies and international organizations	Continue to engage on developing issues related to KYC utilities
Standard-setting bodies and international organizations	Explore whether it is possible for third parties also to conduct risk assessments themselves, as opposed to simply providing information for risk assessments

(continued)

Table 1. Continued	
Organization	Recommendation
Legal entity identifiers (LEIs)	
Standard-setting bodies	Determine whether LEIs can be used for customer identification, verification, and due diligence, and provide relevant guidance
National regulators in countries affected by de-risking	Look for ways to promote LEI issuance
National regulators in countries affected by de-risking	Improve business registries and other relevant information sources that local operating units use to validate information
Financial institutions	Help customers obtain LEIs, especially in countries affected by de-risking
Banks	Begin modifying IT systems to prepare for adoption of LEIs in payment messages
ISO	Continue work on how best to incorporate the LEI into the new payment messaging format
Other Recommendations	
Capacity building and technical assistance	
Affected developing countries	Continue to enhance their own AML/CFT regulatory regimes and supervisory practices
IMF, World Bank, and other TA providers	Conduct efficacy studies of their TA provision and calibrate the delivery of TA based on the studies' findings
FSB	Play a greater role in coordinating TA among the major providers, in order to ensure that TA resources are being allocated efficiently and, to the extent possible, according to the expertise of the provider
Big data systems and machine learning	
National regulators and international organizations	Determine whether local privacy and data sharing laws pose a challenge to the integration of these data sets and whether these laws can or should be amended without compromising privacy
National regulators	Share feedback on SAR submissions
National regulators	Allow financial institutions to share data so as to expand the pool that machine learning programs can learn from
National regulators	Consider a regulatory sandbox to allow financial institutions to experiment with machine learning solutions

INTRODUCTION

In November 2015, the Center for Global Development (CGD) published the report *Unintended Consequences of Anti–Money Laundering Policies for Poor Countries*.[1] The product of a working group comprising scholars, policymakers, market practitioners, and other subject-matter experts, the report warned that efforts to curb illicit finance were producing significant adverse side effects. Partly in response to more stringent enforcement of regulations related to anti–money laundering and countering the financing of terrorism (AML/CFT), as well as sanctions, large international banks had begun exiting relationships with countries and market segments they perceived to be high-risk or else not worth the cost of compliance. Rather than manage illicit finance risk on a case-by-case basis, financial institutions were sometimes choosing to avoid it altogether, a practice that came to be known as "de-risking." These pressures sometimes interacted unfavorably with banks' changing business strategies and heightened cost sensitivity in the wake of the global financial crisis, which put further pressure on low-margin business lines and relationships. As a result of these trends, affected parties could find it harder to access certain financial services, particularly cross-border payments. This situation appeared to pose a risk to international financial integration, financial inclusion, and financial transparency—and by extension, to economic growth and poverty reduction. Among those most affected were already-vulnerable groups in developing countries, including small businesses engaged in international trade, as well as recipients of remittances and humanitarian aid.

The report contributed to growing awareness of de-risking among key public and private stakeholders. Since then, policymakers, regulators, and industry

Table 2. Financial Stability Board Action Plan and Progress Reports to the G20 Regarding De-risking of Correspondent Banks

Publication Date	Title
November 2015	Report to the G20 on Actions Taken to Assess and Address the Decline in Correspondent Banking (FSB 2015)
August 2016	Progress Report to G20 on the FSB Action Plan to Assess and Address the Decline in Correspondent Banking (FSB 2016b)
December 2016	FSB Action Plan to Assess and Address the Decline in Correspondent Banking: End-2016 Progress Report and Next Steps (FSB 2016a)
July 2017	FSB Action Plan to Assess and Address the Decline in Correspondent Banking: Progress Report to G20 Summit of July 2017 (FSB 2017a)
March 2018	FSB Action Plan to Assess and Address the Decline in Correspondent Banking: Progress Report to G20 Finance Ministers and Central Bank Governors Meeting of March 2018 (FSB 2018a)

1. CGD Working Group 2015.

associations have come to regard the mitigation of de-risking as a major imperative. A number of important efforts have been undertaken to better understand the nature and severity of the problem, as well as to devise the means to mitigate it. These efforts, which will be detailed in the following chapters, include research and surveillance, regulatory clarifications, and the development of new technical solutions to regulatory compliance.

Box 1. The International Response: The Financial Stability Board's Action Plan to Address the Decline in Correspondent Banking

At the international level, the policy response to de-risking has been coordinated by the Financial Stability Board (FSB), an international body that monitors risks to the global financial system and coordinates financial-sector policies among its members.[a]

In February 2015, the G20 finance ministers and central bank governors directed the FSB to work with the World Bank and "other relevant bodies" to "examine … the extent of withdrawal from correspondent banking and its implications for financial inclusion, as well as possible policy responses as needed."[b]

In response, the FSB developed a four-point action plan to address the decline in correspondent banking, which it released in November 2015:

1. Further examine the dimensions and implications of the issue
2. Clarify regulatory expectations, as a matter of priority, including more guidance by the Financial Action Task Force
3. Build domestic capacity in jurisdictions that are home to affected respondent banks
4. Strengthen tools for due diligence by correspondent banks[c]

The FSB has provided periodic progress reports to the G20 (see Table 2 for a list of these reports). In addition, it has produced a detailed data analysis of the decline in correspondent banking, as well as an examination of how money transfer operators are being affected, both of which will be discussed in Chapter 1.

a. The FSB's members include the G20 countries, along with Hong Kong, Singapore, Spain, and Switzerland, as well as international financial institutions, international standard-setting bodies, and other international and regional bodies.
b. G20 Finance Ministers and Central Bank Governors 2015, 6.
c. FSB 2015, 1–2

1 RECOMMENDATION 1 OF THE 2015 REPORT:

Rigorously assess the unintended consequences of AML/CFT and sanctions enforcement at the national and the global level

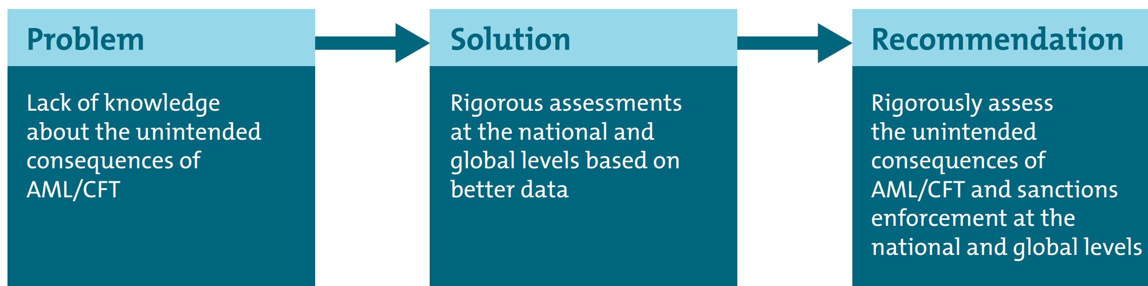
Introduction

At the time of the 2015 report's publication, little systematic analysis had been done on de-risking, largely due to the lack of available data. Anecdotes, roundtable discussions, and nonrepresentative surveys were sufficient to establish the existence of a problem. However, they were insufficient to assess the problem's scale, scope, and severity.[1]

The 2015 report therefore recommended, as a first step, that rigorous assessments be conducted to determine the magnitude of the problem. It suggested that the effort be jointly led by the Financial Stability Board (FSB) and the Financial Action Task Force (FATF), the international standard-setting body on regulations for anti–money laundering and countering the financing of terrorism (AML/CFT). As necessary, these two bodies would work with other international organizations, including the United Nations (on sanctions), the Basel Committee on Banking Supervision, the Committee on Payments and Market Infrastructures (CPMI), the International Monetary Fund (IMF), and the World Bank.[2]

The 2015 report also recommended that FATF revise its mutual evaluation methodology to better capture the unintended consequences of AML/CFT regulations. This methodology is designed to guide peer reviews in which FATF members assess each others' AML/CFT systems for alignment with the FATF Recommendations, in terms of both technical compliance and practical effectiveness. The 2015 report suggested that the methodology should emphasize a "whole economy" view and that it assess whether jurisdictions' AML/CFT regulations are inadvertently displacing legitimate financial activity into the informal sector, where it is harder to track.[3] It also recommended that peer reviews look to whether local firms were engaging in regulatory overcompliance.[4]

Figure 1. Recommendation 1: Problem Identification and Solution Formulation in the 2015 Report



1. CGD Working Group 2015, 41.
2. CGD Working Group 2015, 43.
3. CGD Working Group 2015, 43–44.
4. De Koker and Symington describe corporate regulatory compliance in terms of a spectrum that ranges from "non-compliance" to "liberal compliance" to "conservative compliance" to "over-compliance." They define "over-compliance" as compliance behavior that "exceeds regulatory requirements." Over-compliance is unwelcome if it undercuts regulatory objectives. This could happen, for example, if banks' over-compliance with AML/CFT regulations makes it difficult for individuals to access the formal financial system. See De Koker and Symington 2014, 228–229 and 237.

Table 3. Recommendation 1: Summary		
Organization	**Recommendation**	**Outcome (as of Mid-2018)**
FSB	Conduct a rigorous assessment of the unintended consequences of the AML/CFT and sanctions regulatory environment, including the guidance produced by FATF, with a view to reducing unintended consequences.	The FSB has conducted such an assessment. The World Bank, the IMF, the CPMI, and others have also contributed important research to this issue. These analyses broadly demonstrate that de-risking is pervasive but, in most cases, not systemic.
FATF	Continue to enhance its mutual evaluation methodology to include: 1. Displacement of transactions from more into less transparent channels, which are sometimes informal or processed through lower-tier, less compliant institutions 2. Risks in the whole economy, rather than just in the formal financial sector 3. Risks posed to the important drive toward financial inclusion 4. Overcompliance at the national level and in particular sectors	FATF's mutual evaluation methodology directs assessors to consider risks to financial inclusion. In addition, its guidance to money transfer operators (discussed in Section 3) warns specifically of overcompliance. Partly out of consideration for methodological stability, FATF has not updated its mutual evaluation methodology, though its guidance does direct country authorities to consider risks in the whole economy, not just the financial sector. Finally, FATF's assessor training program now devotes more time to financial inclusion.

The De-risking Research Agenda

Since 2015, our understanding of de-risking has improved considerably. A number of research initiatives—some already published or underway in 2015—have been undertaken at the global, regional, and national levels. Among the first empirical studies were a pair of World Bank survey reports, published in late 2015.[5] These were followed by a series of papers by the IMF in 2016 and 2017.[6] Two other reports—one by the CPMI in 2016,[7] the other by the FSB in 2017[8]—used payments data to analyze, in high resolution, the evolution of international correspondent banking networks from 2011 onward. The Charity & Security Network (CSN), a think tank, was the first organization to conduct a statistically rigorous survey of nonprofits and the financial access problems they were encountering.[9] In addition to these, many other publications have contributed to our understanding of de-risking. (For a more comprehensive list of research on de-risking since 2014, please see the appendix to this chapter.)

While de-risking affects a number of sectors, the policy response and attendant research agenda have generally prioritized correspondent banking relationships (CBRs) due to their systemic importance for international payments. Correspondent banking is a type of bilateral interbank relationship in which

5. World Bank 2015a, 2015b, 2015c.

6. E.g., Erbenová et al. 2016; and IMF 2017.

7. CPMI 2016.

8. FSB 2017b.

9. Eckert, Guinane, and Hall 2017.

one bank (the correspondent bank) provides financial services to another bank (the respondent bank) and usually to the respondent bank's customers as well. "Correspondent clearing" is a particular correspondent banking service whereby the correspondent bank clears payments on behalf of the respondent bank's customers. Correspondent clearing is critical to the proper functioning of international payments in the absence of a centralized global payments system and most banks' lack of branches or subsidiaries in all of the countries in which they or their customers might do business. Typically, large international banks act as correspondents to local and regional banks around the world. These local and regional banks—and their customers—depend on these relationships for access to foreign markets and currencies.[10]

Money transfer operators (MTOs) and nonprofit organizations (NPOs) have been secondary and tertiary priorities, respectively, but are nonetheless recognized as important by international policymakers.[11] The de-risking of MTOs may hinder the transmission of remittances, while the de-risking of NPOs threatens the delivery of humanitarian aid.

At the global level, much of this research effort has been undertaken or coordinated by the FSB, an international body of financial-sector policymakers, at the behest of the G20. In 2015, the G20 tasked the FSB with leading the international response to the decline in correspondent banking (see Box 1 in the Introduction). In the action plan it subsequently developed, the FSB made its first priority to better understand the nature and extent of the problem.[12] While the FSB's main focus has been on correspondent banking, it is now pursuing a secondary work stream on MTOs.

The World Bank published the first empirical analyses of de-risking in late 2015. These consisted of two international surveys—one on correspondent banking, conducted with the support of the FSB and CPMI,[13] and the other on MTOs, at the request of the G20's Global Partnership for Financial Inclusion.[14]

These were followed by additional global studies by the IMF, CPMI, FSB, and International Finance Corporation (IFC).[15] A number of regional and country-level studies have also been produced, including studies published by the Caribbean Development Bank,[16] the United Kingdom's Financial Conduct Authority,[17] and the Commonwealth Secretariat.[18]

---

10. See, for example, World Bank 2017a, 105.

11. These three sectors are not the only ones that have been affected by de-risking. Other customer segments that have reportedly been affected include embassies and diplomatic personnel, financial technology startups (especially those that deal with cryptocurrencies), and, in the United States, banks along the border with Mexico. See, for example, FSB 2016, 28; and GAO, 2018a.

12. FSB 2015, 2.

13. World Bank 2015c.

14. World Bank 2015b.

15. Erbenová et al. 2016; IMF 2017; CPMI 2016; FSB 2017b; Starnes et al. 2017.

16. Boyce 2016; Boyce and Kendall 2016.

17. Artingstall et al. 2016.

18. Hopper 2016.

Think tanks and other civil society organizations have also contributed to furthering our understanding of the issue. Since the end of 2015, some notable contributions include research conducted by CSN,[19] Chatham House,[20] the Human Security Collective,[21] and the Overseas Development Institute,[22] as well as further work by CGD.[23]

These studies generally corroborate each other in their assessment of de-risking's broad contours. First, the de-risking problem is global in nature. Second, its geographic impact falls disproportionately on countries that are small and/or fragile, as well as those subject to US or multilateral sanctions. Third, most of the time, affected institutions are able to find alternative arrangements, but often at the expense of efficiency and transparency. Fourth, de-risking is driven by several interacting factors, including AML/CFT risk, compliance risk, and compliance costs, but also profitability considerations and financial institutions' unrelated business strategy decisions. Reputational risks and heightened concerns about the security climate may also be a factor.

Correspondent Banking Relationships

Among the sectors affected by de-risking is correspondent banking. Correspondent banks provide financial services to respondent banks and through them, to their customers. Large international banks act as correspondents to local and regional banks. Local and regional banks, in turn, depend on these relationships for access to foreign markets and currencies, as do their customers.[24] A decline in CBRs can make it harder for export-oriented businesses to secure trade finance, for migrants to send remittances back home, and for NPOs to provide humanitarian aid abroad.[25] In the most dire scenarios, a total or near-total loss of CBRs could effectively cut a country off from the international financial system—though, to be clear, this has not yet happened in any jurisdiction as a result of de-risking. In these ways, a loss of CBRs may hinder economic development and poverty reduction.

At the global level, the number of CBRs has fallen since 2011, making cross-border correspondent banking activity increasingly concentrated, though the value and volume of payments sent via these relationships has not declined. Data from the Society for Worldwide Interbank Financial Telecommunication (SWIFT) on cross-border correspondent banking activity reveals that from 2011 through the end of 2016, the number of active CBRs declined in every region—by 6 percent globally, though with significant regional variation.[26] (The most recent data, collected in mid-2017, confirm that this downward trend is continuing.[27]) Over the same

19. Eckert, Guinane, and Hall 2017.

20. Keatinge and Keen 2017.

21. Human Security Collective and European Center for Not-for-Profit Law 2018.

22. El Taraboulsi-McCarthy and Cimatti 2018.

23. Collin, Cook, and Soramäki 2016.

24. World Bank 2017a, 105.

25. CGD Working Group 2015, vii–viii.

26. FSB 2017b, 1.

27. FSB 2018b.

time period, however, the number of payments messages sent (i.e., the payments volume) rose substantially—by 36 percent—while the value of those payments also rose, but by much less—less than 10 percent.[28] According to the CPMI and the FSB, the fact that the rise in the value of payments has not been commensurate with the rise in the volume of payment messages suggests that payment chains have lengthened as correspondent banking networks have thinned.[29] With fewer correspondent banks, payments may have to travel more indirect routes, via additional intermediaries, to reach their destination. This is one possible explanation, though there may be others.

It is not yet clear what the effects of this concentration will be. As the FSB points out, consolidation may put the industry on more sustainable footing. On the other hand, it may make correspondent banking networks more vulnerable to disruption, as well as reduce competition and make international payments costlier.[30]

Although the decline in CBRs is a worldwide phenomenon, the global statistics hide important disparities—some currencies, countries, and regions have been harder hit than others, while the effect on developing countries has been mixed. While payments volume has risen globally, 42 countries have seen it shrink. In 30 countries, the value of correspondent banking transactions has also fallen.[31] Importantly, the number of correspondent banking accounts that transact in dollars or euros—the two most important international currencies—have each declined by about 15 percent.[32]

Regions that have been especially affected include the Caribbean, the small states of the Pacific, the Middle East and North Africa, Central Asia, and sub-Saharan Africa. The different studies vary somewhat in their assessment of which of these regions have been worst affected (for examples, see Table 4). By some measures, Europe has experienced the largest decline in the number of active CBRs; however, this may be due to factors unique to that region.[33] In any case, Europe has the most CBRs of any region, so the reduction there may be of less concern than it is elsewhere.[34] For example, the loss of CBRs in places like the small states of the Pacific is especially troublesome, given that these countries typically rely on just a handful of CBRs to begin with.[35]

The countries that have experienced the steepest declines in correspondent banking activity have tended to be either small or high-risk countries. High-risk countries include those under US or multilateral sanctions, such as Iran and North Korea. They also include countries that are afflicted by high levels of crime, terrorism, war, or civil unrest, such as Libya, Syria, Venezuela, and Yemen. Countries

28. FSB 2017b, 3.

29. FSB 2017b, 2, 34.

30. FSB 2017b, 33.

31. FSB 2017b, 29–30.

32. FSB 2017b, 14.

33. Between 2011 and 2016, the number of active CBRs in Europe declined by about 15 percent. However, this decline may be explained by post–global financial crisis consolidation in the European banking sector, along with the shift away from bilateral CBRs and toward centralized payment systems following the introduction of the Single Euro Payments Area. See FSB 2017b, 2, 19.

34. FSB 2017b, 19.

35. Alwazir et al. 2017, 22.

Table 4. Regions Most Affected by a Decline in CBRs, Ranked			
Study	IFC 2017 Study (Starnes et al. 2017)	FSB 2017 Study (FSB 2017b)	World Bank 2015 Study (World Bank 2015c)
Measure	Percentage of IFC client banks reporting a decline in CBRs	Decline in the number of active cross-border CBRs (SWIFT data)	Percentage of surveyed banking authorities reporting a *significant* decline in foreign CBRs
Rank 1	Sub-Saharan Africa (35%)	Eastern Europe (-16%)	Latin America and the Caribbean (50%)
Rank 2	Europe and Central Asia (29%)	Europe (excl. Eastern Europe) (-15%)	Africa (42%)
Rank 3	Latin America and the Caribbean (27%)	Oceania (-12%)	Europe and Central Asia (31%)
Rank 4	Middle East and North Africa (22%)	Americas excl. North America (-8%)	South Asia (20%)

with large offshore banking sectors, such as several of those in the Caribbean, have experienced significant declines as well.[36] Small countries face a different problem. Correspondent banking is typically a fee-based service, and small countries may not be able to generate a sufficient volume of payments to cover the costs of servicing them, especially when compliance costs are rising.

The effect on low- and middle-income countries overall has been varied.[37] While some of these countries have experienced declines in correspondent banking activity, several others have experienced growth over the same period.

At this time, the decline in CBRs is not a systemic issue for most countries. Since 2015, the IMF has been monitoring CBR trends as part of its Article IV consultations, the annual macroeconomic assessments it conducts on its members. In 2017, the IMF reported that in 23 countries, the decline in CBRs has had "a moderate or no significant impact" on the local financial system.[38] However, in four countries—Belize, Iran, Liberia, and Sudan—the effect has been more serious. In Belize, for example, only 2 of 10 commercial banks still have access to full-service CBRs, and even the central bank has lost some of its CBRs. In Liberia, every commercial bank has lost at least one CBR, and in Sudan, nearly half of all CBRs were terminated between 2012 and 2015.[39] Similarly, the World Bank, in its most recent report on the decline of correspondent banking, noted that among the eight countries it studied, the macroeconomic effect was muted.[40] It observed that in most cases, large international banks had not withdrawn from countries altogether but, rather, had terminated their relationships with some banks while focusing on improving their relationships with others.[41]

36. Alleyne et. al. 2017, 13.
37. IMF 2017, 12.
38. IMF 2017, 15.
39. IMF 2017, 15.
40. World Bank 2018a, vii.
41. World Bank 2018a, vii.

The de-risking of CBRs can still be a serious problem on the microeconomic level, even if it has not yet (and may never) precipitate a macro-financial crisis. The IMF reports that a number of Article IV reports "have raised concerns about potential significant implications in the future on remittances and general financial inclusion, if the withdrawal trends were to continue."[42] The World Bank found that the effect on individual banks could be severe, with de-risked banks losing many of their customers (especially corporate customers and exporters), as well as some of their most profitable business lines. De-risked banks also reported significant declines in remittance volumes and, in some cases, being almost entirely cut off from the international financial system.[43] Banks that were able to establish new correspondent relationships often did so on much less favorable terms than they had before.[44]

AML/CFT is one driver of de-risking, but there are others. For example, in the FSB's 2017 study, banks were surveyed on their reasons for terminating CBRs. The primary reason they gave was changes in business strategy, which accounted for 40 percent of terminations. Three other factors—a lack of profitability, a change in risk appetite, and AML/CFT/sanctions–related issues—each accounted for 20 percent of CBR terminations. Among the various AML/CFT/sanctions–related reasons given, compliance costs and respondents' inadequate AML/CFT risk controls featured most prominently.[45]

Money Transfer Operators and Nonprofit Organizations

The de-risking of MTOs and NPOs can be related to the de-risking of CBRs, either directly or indirectly; however, it can also occur independently. MTOs and NPOs may lose financial access as a direct result of termination of their banks' correspondent accounts. Banks may also close MTO and NPO accounts, or otherwise restrict their activity, in order to placate their correspondent banks. In still other cases, the de-risking of MTOs and NPOs is unrelated to developments in banks' CBRs. As with the de-risking of CBRs, there are usually multiple drivers, including profitability concerns, inability or unwillingness to manage risk, doubts about the counterparties' risk controls, and pressure from regulators and other stakeholders.

MTOs

The de-risking of MTOs has been studied in less depth than the de-risking of CBRs. The first—and still the most comprehensive—survey was conducted by the World Bank in 2015.[46] Another national-level survey was published around the same time by the Australian Transaction Reports and Analysis Centre (AUSTRAC), Australia's financial intelligence agency.[47] Most recently, the US Government Accountability

42. IMF 2017, 15.
43. World Bank 2018a, viii.
44. World Bank 2018a, vii.
45. FSB 2017b, 43.
46. World Bank 2015b.
47. AUSTRAC 2015.

Office (GAO) published a report on MTOs that were facilitating remittances between the United States and selected fragile countries.[48]

The de-risking of MTOs is widespread, according to the World Bank. Of the 82 MTOs that responded to a 2015 World Bank survey, 28 percent had lost access to traditional banking services.[49] Of these, three-quarters had been able to find work-around solutions, while a quarter were unable to access banks at all.[50] Similarly, all 12 of the MTOs interviewed by the GAO had lost some banking relationships over the previous 10 years and reported that it was now harder to open new accounts.[51] Further, nine of the 12 MTOs had resorted to nonbank channels including couriers and armored trucks.[52]

The de-risking of MTOs agents is a particular concern. Of the MTOs surveyed by the World Bank, 45 percent said their agents had lost access to banking services.[53] Those surveyed by the GAO likewise reported that agents' loss of banking access was a frequent occurrence.[54] These reports are particularly troubling because MTOs use agents in order to extend their reach into poor and rural areas where they would otherwise not operate. The World Bank warned that such a loss could result in diminished financial access in these areas, particularly for remittance recipients.[55]

As with CBRs, several factors contribute to banks' closure of MTO accounts. Reasons include low profitability, pressure from (or fear of) correspondent banks or regulators, lack of confidence in MTOs' risk controls, and reputational risk.[56]

Banks perceive MTOs to be weakly regulated, though some governments and MTOs disagree. While it is unsurprising that MTOs would argue that they are adequately supervised, 11 of the 13 G20 governments surveyed by the World Bank shared this view. However, fewer than half of the surveyed banks felt they could fully rely on governments to police the MTO sector.[57]

It is unclear how the de-risking of MTOs has affected remittance prices and flows. After falling earlier in the decade, the average worldwide cost of remitting US$200 has hovered around 7 percent—well above the 3 percent target set forth in the Sustainable Development Goals.[58] The World Bank attributes this stagnation to three factors: de-risking, a lack of competition in many countries, and obsolete technology.[59] The World Bank has observed that while some affected countries have experienced a rise in remittance processing prices and/or a decline inflows, other

48. The GAO selected four fragile countries—Haiti, Liberia, Nepal, and Somalia—that have large emigrant populations in the United States from whom they receive significant remittances. The GAO interviewed 12 of the 18 MTOs that account for at least 80 percent of remittance flows to these four countries. See GAO 2018b, 3–4.

49. World Bank 2015b, 1.

50. Reported work-around solutions include "a) using other MTOs, b) operating via cash management companies and physically transporting cash, and c) using personal bank accounts" (World Bank 2015b, 19).

51. GAO 2018b, 16–17.

52. GAO 2018b, 17.

53. World Bank 2015b, 8.

54. GAO 2018b, 17.

55. World Bank 2015b, 19–20.

56. World Bank 2015b, 19.

57. World Bank 2015b, 10.

58. World Bank 2017b, 4.

59. World Bank 2017b, 2.

countries have had the opposite experience.[60] It may be that MTOs are making an effort to avoid passing rising costs on to their customers. The MTOs surveyed by the GAO indicated that they had absorbed the higher costs or increased their fees only marginally, though they also said that the loss of financial access limited their ability to grow further.[61]

In Australia in 2015, the de-risking of MTOs had not resulted in a measurable decrease in remittance outflows. AUSTRAC recorded more than 700 account closures from January 2014 to April 2015 but could not detect any overall effect on outward remittance flows. AUSTRAC reasoned that this result could have come about because de-risked MTOs were able to open accounts at other banks, or because de-risked MTOs facilitated only small portion of outward remittances, or because the customers of de-risked MTOs were able to take their business elsewhere.[62]

NPOs

Until recently, the de-risking of NPOs had been studied less thoroughly than that of MTOs, though the situation is now changing. To date, there has been only one major representative survey of NPOs, conducted by CSN, a US-based nonprofit.[63] That study, published in early 2017, focused on NPOs based in the United States and active internationally.

The de-risking of NPOs is not limited to bank account closures; less severe, but still disruptive, financial access problems are more widespread. CSN found that a small percentage of NPOs (6 percent) had had their bank accounts closed, and that a slightly larger percentage (10 percent) had been denied account openings. Other frictions and restrictions were more widespread. These included wire transfer delays (experienced by 37 percent of respondents), unusual documentation requests (26 percent), and higher fees (33 percent). Altogether, approximately two-thirds of respondents reported encountering some type of financial access problem, and 15 percent reported encountering these problems "regularly or constantly."[64]

Banks continue to view NPOs as high in risk. The FATF revised Recommendation 8 in 2016 to remove its blanket designation of NPOs as "high-risk" customers.[65] Nonetheless, CSN's stakeholder interviews indicate that this perception remains widespread and that banks will not alter their restrictive approach to this sector without explicit guidance from US regulators.[66]

Over the course of 2017 and 2018, the focus on NPO de-risking has increased. New studies include a 2018 report by the Charity Finance Group, a UK-based association, which conducted a small, nonrepresentative survey of its members. Respondents reported encountering many of the same issues described in the CSN survey,

---

60. World Bank 2018a, 12.

61. GAO 2018b, 18 and 19.

62. AUSTRAC 2015, 7, 9, and 13.

63. Eckert, Guinane, and Hall 2017.

64. Eckert, Guinane, and Hall 2017, 38–41.

65. FATF Recommendation 8 (originally Special Recommendation 8) was introduced shortly after 9/11 as one of the Special Recommendations to combat terrorist financing. It designated NPOs as being at high risk of terrorist financing. See FATF 2016d.

66. Eckert, Guinane, and Hall 2017, 70.

including blocked or delayed international wire transfers, especially when dealing with correspondent banks.[67] A 2017 report by Chatham House, a UK-based think tank, focused on UK-based humanitarian organizations and drew its insights from a pair of workshops and roundtable discussions. Like the CSN study, Chatham House reported that the FATF's revision of Recommendation 8 had not alleviated NGOs' financial access problems.[68] A 2018 report by the Overseas Development Institute, a British think tank, examined the de-risking of humanitarian organizations operating in Yemen, finding that transactions could be delayed for months at a time and that de-risking had fueled the rise of black markets for both goods and payments services.[69]

FATF's Mutual Evaluation Methodology

FATF's mutual evaluation methodology does ask country assessors to take financial inclusion objectives into consideration. Though it does not mention "overcompliance" by name, it does direct country assessors to be on the lookout for its effects.[70] In Immediate Outcome 4 of its "effectiveness assessment," ("Financial institutions adequately apply AML/CFT measures commensurate with their risks"),[71] FATF provides assessors with a list of factors to consider, which include, among others: "7. Does the manner in which AML/CFT measures are applied prevent the legitimate use of the formal financial system, and what measures are taken to promote financial inclusion?"[72]

Partly out of consideration for methodological stability, FATF has not updated its mutual evaluation methodology, though its guidance does direct country authorities to consider the risks in the whole economy, not just in the financial sector. Finally, FATF's assessor training program now devotes more time to financial inclusion.

New Recommendations

National governments should conduct comprehensive regulatory impact assessments of their AML/CFT and sanctions regimes. On the cost side, such assessments would include direct compliance costs incurred by financial institutions and other affected sectors, as well as indirect costs related to customers' displacement—either into more expensive or more restrictive financial arrangements, or into the informal sector. On the benefits side, such assessments should attempt to quantify the degree to which these regulations are preventing money laundering and other financial crimes.

A statistically rigorous study should be conducted of the financial access problems of internationally active European NPOs. Such a study would complement the CSN survey of internationally active American NPOs.

67. CFG 2018, 11.

68. Keatinge and Keen 2017, 6.

69. El Taraboulsi-McCarthy and Cimatti 2018, 10.

70. FATF does address the issue of overcompliance in its MTO guidance. See FATF 2016b.

71. FATF added the "effectiveness assessment" to its mutual evaluation methodology in 2013. The purpose of this assessment is to look beyond technical compliance with FATF's recommendations in order to determine whether a country's AML/CFT regime is meeting its core objectives. See FATF 2013.

72. FATF 2017d, 103.

The international remittances market should continue to be monitored for signs of stress due to the de-risking of MTOs. If necessary, an update to the World Bank's 2015 survey of remittance service providers should be considered. To our knowledge, there has not been a similar effort to do an empirical study at the global level since then.

Table 5. New Recommendations

Organization	Recommendation
National regulators in international financial centers	Conduct comprehensive regulatory impact assessments of AML/CFT and sanctions regimes
Research organizations	Conduct a statistically robust survey of European nonprofits engaged in humanitarian work abroad to determine the extent of their financial access problems
FSB or World Bank	Continue to monitor the international remittances market for signs of stress due to the de-risking of MTOs. If necessary, an update to the World Bank's 2015 survey of remittance service providers should be considered. To our knowledge, there has not been a similar effort to do an empirical study at the global level since then

Appendix to Chapter 1. Policy and Research Papers on De-risking, 2014 to mid-2018

Table 6 is not intended to be comprehensive catalogue of all publications on de-risking. In particular, it excludes short analyses and commentary. It may also fail to include all research and policy papers on de-risking, particularly those originating in academia. See the reference list at the end of this paper for full bibliographic information on the publications listed below. The FSB action plan and progress reports to the G20 are listed separately in Table 2.

Table 6. Policy and Research Papers on De-risking, 2014 to mid-2018

Organization or Authors	Title/Link/Citation	Publication Date	Sector Focus	Geographic Focus
2014				
Bankers Association for Finance and Trade, Basel Institute on Governance, British Bankers' Association, International Chamber of Commerce, Institute of International Finance, and Wolfsberg Group	De-risking: Global Impact and Unintended Consequences for Exclusion and Stability (BAFT et al. 2014)	October 2014	General	Global
Demos	Uncharitable Behaviour (Keatinge 2014)	December 2014	NPOs	Global
2015				
Adeso, Global Center on Cooperative Security, and Oxfam	Hanging by a Thread: The Ongoing Threat to Somalia's Remittance Lifeline (Paul et al. 2015)	February 2015	CBRs	Somalia
Charity Finance Group	Briefing: Impact of Banks' De-risking on Not for Profit Organisations (CFG 2015)	March 2015	CBRs	United Kingdom
IMF and Union of Arab Banks	The Impact of De-risking on MENA Banks (IMF and Union of Arab Banks 2015)	May 2015	MTOs	Middle East and North Africa
Milken Institute	Framing the Issues: De-risking and Its Consequences for Global Commerce and the Financial System (Warden 2015)	July 2015	MTOs	Global
World Bank	Report on the G20 Survey on De-risking Activities in the Remittance Market (World Bank 2015b)	October 2015	General	Global
AUSTRAC	Bank De-risking of Remittance Business (AUSTRAC 2015)	November 2015	General	Australia
CGD	Unintended Consequences of Anti–Money Laundering Policies for Poor Countries (CGD Working Group 2015)	November 2015	General	Global
Global Center on Cooperative Security and Oxfam	Understanding Bank De-risking and Its Effects on Financial Inclusion: An Exploratory Study (Durner and Shetret 2015)	November 2015	CBRs	Global
World Bank	Fact Finding Summary from De risking Surveys (World Bank 2015a)	November 2015	General	Global
World Bank	Withdrawal from Correspondent Banking: Where, Why, and What to Do About It (World Bank 2015c)	November 2015	CBRs	Global

(continued)

Table 6. Continued				
Organization or Authors	Title/Link/Citation	Publication Date	Sector Focus	Geographic Focus
2016				
John Howell & Co. Ltd. for the UK Financial Conduct Authority	Drivers & Impacts of De-risking (Artingstall et al. 2016)	February 2016	General	General
Association of Supervisors of Banks of the Americas	Compliance/Regulatory Risk in Financial Activity: De-risking in the Americas (ASBA 2016)	March 2016	General	General
Caribbean Development Bank	Decline in Correspondent Banking Relationships: Economic Impact on the Caribbean and Possible Solutions (Boyce and Kendall 2016)	May 2016	CBRs	CBRs
Caribbean Development Bank	Strategic Solutions to "De risking" and the Decline of Correspondent Banking Relationships (Boyce 2016)	May 2016	CBRs	Caribbean
World Bank and Association of Certified Anti–Money Laundering Specialists (ACAMS)	Stakeholder Dialogue on De risking: Findings and Recommendations (World Bank and ACAMS 2016)	May 2016	General	Global
IMF	The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action (Erbenová 2016)	June 2016	CBRs	Global
CPMI	Correspondent Banking (CPMI 2016)	July 2016	CBRs	Global
Commonwealth Secretariat	Disconnecting from Global Finance: The Impact of AML/CFT Regulations in Commonwealth Developing Countries (Hopper 2016)	July 2016	General	Commonwealth Nations
Arab Monetary Fund, IMF, and World Bank	Withdrawal of Correspondent Banking Relationships (CBRs) in the Arab Region: Recent Trends and Thoughts for Policy Debate (Arab Monetary Fund, IMF, and World Bank 2016)	September 2016	CBRs	Middle East and North Africa
CGD	The Impact of Anti-Money Laundering Regulation on Payment Flows: Evidence from SWIFT Data (Collin, Cook, and Soramäki 2016)	December 2016	CBRs	Global
2017				
CSN	Financial Access for US Nonprofits (Eckert, Guinane, and Hall 2017)	February 2017	NPOs	United States
World Bank and ACAMS	Stakeholder Dialogue on De risking: Supporting Financial Access for Humanitarian Organizations and Charities (World Bank and ACAMS 2017)	February 2017	NPOs	Global
Duke Law International Human Rights Clinic and Women Peacemakers Program	Tightening the Purse Strings: What Countering Terrorism Financing Costs Gender Equality and Security (Duke Law International Human Rights Clinic and Women Peacemakers Program 2017)	March 2017	NPOs	Global

(continued)

Table 6. Continued

Organization or Authors	Title/Link/Citation	Publication Date	Sector Focus	Geographic Focus
IMF	Recent Trends in Correspondent Banking Relationships—Further Considerations (IMF 2017)	March 2017	CBRs	Global
Chatham House	Humanitarian Action and Non-state Armed Groups: The Impact of Banking Restrictions on UK NGOs (Keatinge and Keen 2017)	April 2017	NPOs	United Kingdom
IMF	Challenges in Correspondent Banking in the Small States of the Pacific (Alwazir, Jamaludin, Lee, Sheridan, and Tumbarello 2017)	April 2017	CBRs	Pacific Islands
Louis de Koker, Supriya Singh, and Jonathan Capal	Closure of Bank Accounts of Remittance Service Providers—Global Challenges and Community Perspectives in Australia (de Koker, Singh, and Capal 2017)	June 2017	MTOs	Australia
Centre for International Governance Innovation	De-risking: Effects, Drivers, and Mitigation (Haley 2017)	July 2017	CBRs	Global
FSB	FSB Correspondent Banking Data Report (FSB 2017b)	July 2017	CBRs	Global
Eastern and Southern Africa Anti–Money Laundering Group (ESAAMLG)	Survey Report on De-risking in the ESAAMLG Region (ESAAMLG 2017)	September 2017	General	Sub-Saharan Africa
IFC	De-risking and Other Challenges in the Emerging Market Financial Sector: Findings from IFC's Survey on Correspondent Banking (Starnes et al. 2017)	September 2017	CBRs	Global
IMF	Loss of Correspondent Banking Relationships in the Caribbean: Trends, Impact, and Policy Options (Alleyne et al. 2017)	September 2017	CBRs	Caribbean
IMF	Understanding Correspondent Banking Trends: A Monitoring Framework (Jan Grolleman and Jutrsa 2017)	October 2017	CBRs	Global
2018				
Wilson Center	De-risking of Correspondent Banking Relationships: Threats, Challenges and Opportunities (Haley 2018)	January 2018	CBRs	Global
CGD	Fixing AML: Can New Technology Help Address the De-risking Dilemma? (Woodsome and Ramachandran 2018)	February 2018	General	Global
Dutch Ministry of Finance, World Bank, and Human Security Collective	International Stakeholder Dialogue: Ensuring Financial Services for Non-profit Organizations (Dutch Ministry of Finance, World Bank, and Human Security Collective 2018)	February 2018	NPOs	Global

(continued)

Table 6. Continued				
Organization or Authors	**Title/Link/Citation**	**Publication Date**	**Sector Focus**	**Geographic Focus**
Overseas Development Institute	Counter-terrorism, De risking and the Humanitarian Response in Yemen: A Call for Action (El Taraboulsi-McCarthy and Cimatti 2018)	February 2018	NPOs	Yemen
GAO	Bank Secrecy Act: De risking along the Southwest Border Highlights Need for Regulators to Enhance Retrospective Reviews (GAO 2018a)	February 2018	Local banks	United States
Charity Finance Group	Impact of Money Laundering and Counter Terrorism Regulations on Charities (CFG 2018)	March 2018	NPOs	United Kingdom
FSB	FSB Correspondent Banking Data Report—Update (FSB 2018b)	March 2018	CBRs	Global
FSB	Stocktake of Remittance Service Providers' Access to Banking Services (FSB 2018c)	March 2018	MTOs	Global
Human Security Collective and European Center for Not-for-Profit Law	At the Intersection of Security and Regulation: Understanding the Drivers of "De-risking" and the Impact on Civil Society Organizations (Human Security Collective and European Center for Not-for-Profit Law 2018)	March 2018	NPOs	Brazil, Ireland, and Mexico
GAO	Remittances to Fragile Countries: Treasury Should Assess Risks from Shifts to Non-banking Channels (GAO 2018b)	March 2018	MTOs	Haiti, Liberia, Nepal, Somalia, and the United States
World Bank	The Decline in Access to Correspondent Banking Services in Emerging Markets: Trends, Impacts, and Solutions (World Bank 2018a)	April 2018	CBRs	Bangladesh, Guatemala, Jamaica, Mexico, the Philippines, Samoa, South Africa, and Tonga

2 RECOMMENDATION 2 OF THE 2015 REPORT:

Generate better data and share data to facilitate regulatory impact assessments

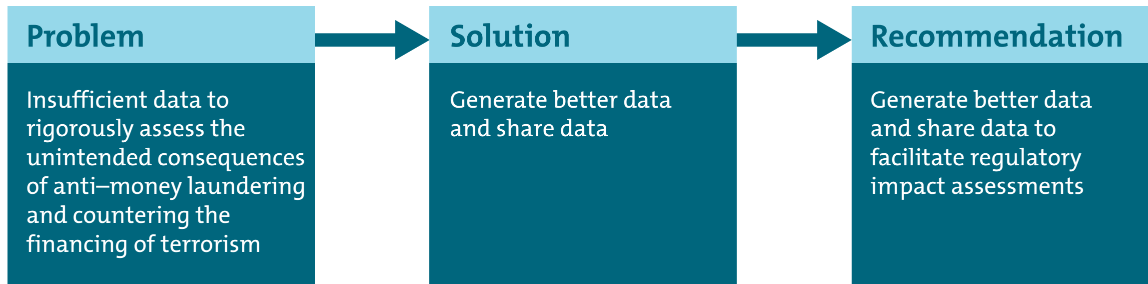
Introduction

Good policymaking depends on rigorous analysis, which, in turn, depends on high-quality data. As of late 2015, policymakers lacked sufficient information to judge the extent of the de-risking phenomenon. It would be hard for them to devise an effective policy response without a better understanding of the problem. Moreover, many policymakers, especially in the United States, doubted the seriousness of the problem, pointing to the lack of hard evidence. This became a sticking point. "At present," the CGD Working Group wrote, "the discussion is limited by the quality and quantity of the data at hand."[73]

The CGD Working Group recommended a two-pronged solution: "better data generation and better data sharing by entities, both public and private, that already hold information."[74] Specifically, it called for more representative surveys of banks, money transfer operators (MTOs), and nonprofit organizations (NPOs), facilitated by the publication, in machine-readable format, of government registries of these organizations.[75] The working group further requested that entities with data on cross-border transactions make these data available, in anonymized format, to entities conducting research in the public interest.

The broad thrust of these recommendations has been taken up, though not all of the particulars. In addition, more progress has been made on correspondent banks than on MTOs or NPOs.

Figure 2. Recommendation 2: Problem Identification and Solution Formulation in the 2015 Report



73. CGD Working Group 2015, 44.
74. CGD Working Group 2015, 46.
75. CGD Working Group 2015, 44.

Table 7. Recommendation 2: Summary		
Organization	**Recommendation**	**Outcome (as of Mid-2018)**
World Bank	Make publicly available both the results and, if possible, the underlying anonymized data from its de-risking survey of banks, MTOs, and governments as soon as possible	The World Bank published the results of its surveys in late 2015.[a] The World Bank has not made available the underlying anonymized data from these surveys.
Financial Stability Board (FSB)	Direct the World Bank to carry out representative, countrywide surveying of NPOs involved in the delivery of humanitarian assistance, banks and MTOs.	The World Bank has recently published a comparative summary of eight country case studies, which focused on correspondent banking relationship de-risking and also examined the downstream effects on MTOs and NPOs.[b]
Government agencies	Those that keep detailed registries of regulated MTOs and NPOs should make available headline statistics about the numbers and nature of such organizations. Make the data that they are using for risk analyses and regulatory impact assessments available to other jurisdictions and to parties conducting analyses that are demonstrably in the public interest.	Some government agencies in the United States and the UK make these data available.
National financial intelligence units	Query financial institutions for data regarding the volume, amounts, and types of transactions associated with MTOs, NPOs, and banking correspondents	The authors have not found evidence that governments in the US or UK are collecting this information.
The Society for Worldwide Interbank Financial Telecommunication (SWIFT), the Clearing House Interbank Payments System (CHIPS), the Clearing House Automated Payments System (CHAPS) and the Bank for International Settlements, on behalf of banks	Make available data on bilateral payment flows and the number of correspondent banking relationships between countries.	SWIFT has made its data available to the Committee on Payments and Market Infrastructures (CPMI) and to the FSB. SWIFT also makes its data available to certain researchers upon application. The CPMI and FSB have included detailed breakdowns of the data they collected from SWIFT, but not the raw data.

a. World Bank 2015a, 2015b, and 2015c.
b. World Bank 2018a.

Data Generation for Analysis and Ongoing Monitoring

The Financial Stability Board (FSB) made data collection and analysis the first priority in its four-point action plan to address the decline in correspondent banking.[76] As described in the previous section, the FSB produced one data-driven analysis of its own and supported several others, including those by the World Bank and the Committee on Payments and Market Infrastructures (CPMI). These analyses drew mainly on ad hoc international surveys and, in a few cases, on cross-border transactions data provided by the Society for Worldwide Interbank Financial Telecommunication (SWIFT).

The FSB also recognizes the need for more routine and systematic data collection to support the ongoing monitoring of international correspondent banking trends. Ongoing monitoring is needed, first and foremost, because of the problem's persistence. The decline in correspondent banking relationships (CBRs) continued largely unabated through the end of 2016, according to the most recent published data. The FSB is especially concerned about the need to monitor concentration risk in certain correspondent banking corridors, which could precipitate systemic financial fragility.[77] Ongoing monitoring is also needed to assess whether recent policy responses have had the desired effect, or whether further adjustments are called for.

The FSB is developing a plan for more systematic data collection at the national level, as well as more routine monitoring at the global level. As part of this effort, SWIFT has agreed to provide the FSB with semiannual country data with coverage through the end of 2018.[78] This data set will comprise measures of correspondent banking activity, including the aggregated value and volume of transactions, as well as the number of active CBRs. Discussions are ongoing about making other types of data available. Such data collection will allow policymakers to monitor conditions in international correspondent banking and respond to emerging problems more quickly.

International Monetary Fund (IMF) staff recently proposed a framework for national authorities to monitor international correspondent banking trends in their own jurisdictions.[79] The proposed framework includes two versions: a minimum-scope framework, which uses data that regulators can obtain directly from banks and analyze in Excel, and an expanded-scope framework that also incorporates data from SWIFT but requires the use of statistical software, such as R. The categories of data include volumes and values of payments at the system levels (inflows and outflows), total number of active CBRs, currencies, and gross and net change in the number of active correspondents.

Data generation for MTOs and NPOs has not been as deep or sustained. The most detailed examination of MTOs remains the World Bank's 2015 study.[80] To date, no government study has examined the de-risking problem with NPOs.

76. FSB 2015, 1.

77. FSB 2017a, 8.

78. FSB 2017a, 8.

79. Jan Grolleman and Jutrsa 2017.

80. World Bank 2015b.

Data Sharing

SWIFT is the main provider of cross-border transactions data used to analyze international correspondent banking trends. SWIFT is the most commonly used messaging system for cross-border payments.[81] As such, its statistics may be used to approximate trends in international correspondent banking activity. As noted above, SWIFT has shared its data with the CPMI and the FSB, initially on an exceptional basis and now as part of a two-year agreement with the FSB set to end in January 2019. SWIFT also makes data available to researchers upon application through the SWIFT Institute. CGD successfully applied to use SWIFT data for a research study published in 2016.[82]

Neither the CPMI nor the FSB have made the data they received from SWIFT available to the public. However, they have published detailed tables that can be used for further analysis. Given the proprietary and sensitive nature of the data, the organizations' carefulness is understandable.

Other payment market infrastructure providers have been less forthcoming. To our knowledge, the Clearing House Interbank Payments System (CHIPS) and the Clearing House Automated Payment System (CHAPS) have not provided data to authorities. However, it is not publicly known whether these organizations were ever approached with such a request.

Publicly Available Data on MTOs and NPOs

The Financial Crimes Enforcement Network (FinCEN) maintains a public money services business (MSB) registration list on its website.[83] The list, which was first introduced in 2012, includes all currently registered MSBs, is searchable, and can be downloaded in its entirety in Excel.[84] However, FinCEN does not make available headline statistics, nor does it maintain historical statistics. Historical statistics would be useful for researchers to be able to conduct time series analyses of the sector.

The UK Financial Conduct Authority (FCA) maintains a Financial Services Register, which includes MSBs, as was pointed out in the 2015 CGD report. However, the register remains limited to individual firm look-up—a complete copy of the data set in machine-readable format is not available. The register offers data extracts for a fee. As with FinCEN, the availability of aggregated and historical data would be helpful to researchers and policymakers looking at the health and possible signs of stress in the MTO industry.

Data on US NPOs can be obtained from the IRS, as the Charity & Security Network did for its study.[85] In the UK, the Charity Commission maintains a public register of charities, which can be downloaded.

---

81. SWIFT is a messaging system for transmitting payment orders, not a payments system.

82. Collin, Cook, and Soramäki 2016

83. Available at https://www.fincen.gov/msb-state-selector.

84. FinCEN 2011.

85. Eckert, Guinane, and Hall 2017.

Monitoring by Financial Intelligence Units

The authors did not find evidence that government authorities in the United States or the UK are monitoring transaction trends in CBRs, MTOs, or NPOs in their respective jurisdictions. For US MTOs, the Government Accountability Office recently confirmed that the data currently being collected do not allow the US Treasury to assess the effects of MTO de-risking, because banks are required to identify only those remittances made by individual direct customers; they typically do not identify remittances sent via MTOs.[86] Such data collection efforts could be important to monitoring the sectors for early warning signs of financial access problems.

New Recommendations

We reiterate our recommendation that national authorities monitor transaction trends among CBRs, MTOs, and NPOs. For correspondent banking, such a monitoring regime could be based on the framework detailed in the IMF paper "Understanding Correspondent Banking Trends: A Monitoring Framework."[87]

If the de-risking problem has not abated by 2018, the FSB should seek to enter into a longer-term arrangement with SWIFT regarding the monitoring of flows from these relationships.

Table 8. New Recommendations

Organization	Recommendation
National regulators in international financial centers and countries affected by de-risking	Implement systematic monitoring of account and transaction activities in correspondent banking, remittances (including those made through MTOs), and NPOs focused on humanitarian activities
FSB and SWIFT	If de-risking has not abated, continue to share and analyze data regarding global trends in correspondent banking relationships and activity

86. GAO 2018b, 34.

87. Jan Grolleman and Jutrsa 2017.

3 RECOMMENDATION 3 OF THE 2015 REPORT:

Strengthen the risk-based approach

Introduction

The 2015 CGD report noted the difficulty that domestic regulators and banks encounter in designing and implementing risk mitigation measures that are consistent and proportionate, particularly for "higher-risk but nonetheless socially valuable customers."[88] The report suggested that this difficulty may be in part because the Financial Action Task Force (FATF) either had not clarified certain concepts related to the risk-based approach (RBA) or had not taken these concepts to their logical conclusion. The report suggested several avenues through which FATF could provide greater regulatory clarification.

Figure 3. Recommendation 3: Problem Identification and Solution Formulation

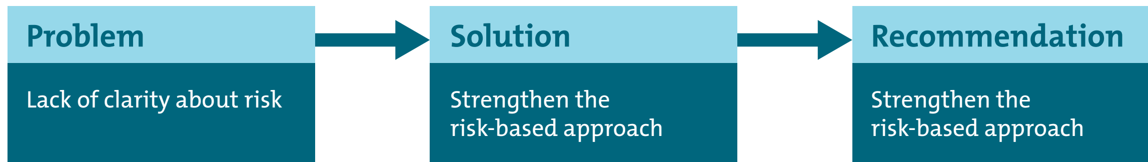


Table 9. Recommendation 3: Summary		
Organization	**Recommendation**	**Outcome (as of Mid-2018)**
FATF	Provide a definition of money laundering and terrorist financing risk for its purposes that is consistent with the International Organization for Standardization (ISO) definition and existing private-sector definitions of risk.	FATF has not revised its definition of money laundering or terrorist financing, due to the need to encompass legal definitions in various jurisdictions. However, it has issued additional guidance on the RBA.
FATF	Clarify its thinking regarding transparency and the trading off of risks in the formal versus informal sectors	FATF officials frequently discuss transparency and trade-offs in their public statements. FATF's guidance now regularly incorporates the goal of ensuring financial inclusion.
FATF	Further encourage simplified due diligence where it is in the best interests of transparency	FATF has encouraged simplified due diligence in its money transfer operator guidance and has recently updated its financial inclusion guidance to highlight examples of countries applying simplified due diligence.
FATF	Urgently revise its Recommendation 8 to reflect the fact that NPOs may be vulnerable to terrorist abuse by virtue of their activities, rather than whether they happen to be an NPO or not.	FATF has revised Recommendation 8 to remove the assertion that NPOs are especially vulnerable to terrorist financing.

88. CGD Working Group 2015, 47.

Clarifying Regulatory Expectations about the RBA—International Standard Setters

International standard-setting bodies, including FATF and the Basel Committee on Banking Supervision (BCBS), have issued new or revised guidance on how to apply the RBA in certain sectors affected by de-risking. FATF and BCBS have both published correspondent banking guidance. In addition, FATF has published new guidance on money transfer operators, or MTOs (discussed in the next section).

In October 2016, FATF issued its correspondent banking guidance. The guidance clarified that correspondent banks are not "intended, expected, or required" to conduct due diligence on the customers of their respondent banks, a practice referred to as "know-your-customer's-customer" (KYCC). Rather, correspondent banks need to follow up on a transaction only if they detect unusual or suspicious activity.[89] The guidance clarified that not all correspondent banking relationships (CBRs) present the same degree of risk. It also provided indicators of higher-risk CBRs and recommendations on how to manage them.[90]

In June 2017, the BCBS released its finalized correspondent banking guidance as a supplement to its guidelines on the Sound Management of Risks Related to Money Laundering and Financing of Terrorism.[91] This guidance was meant to complement FATF's guidance issued the previous year. The BCBS's guidance affirmed that nested CBRs are "an integral and legitimate part of correspondent banking … [because they allow] regional banks to help small local banks within the respondent's region obtain access to the international financial system."[92] The BCBS also included a list of risk indicators to consider and provided specific guidance on the use of KYC (know-your-customer) utilities for information gathering.[93]

In October 2017, the Wolfsberg Group released a new version of its questionnaire for correspondent banks.[94] The questionnaire is meant to set an industry standard for the information that correspondent banks should collect from their respondents. At the time of the questionnaire's release, the 13 members of the Wolfsberg Group—all large international banks—announced that they would adopt the new standard, as did SWIFT's KYC Registry.

Clarifying Regulatory Expectations about the RBA—National Regulators

The US Department of the Treasury has issued multiple clarifications of its expectations relating to anti–money laundering and countering the financing of terrorism (AML/CFT) and sanctions compliance. Most prominently, in August 2016, it released a joint fact sheet with the federal banking agencies (FBAs)[95] outlining its

89. FATF 2016a, 4.

90. FATF 2016a, 13.

91. BCBS 2017.

92. BCBS 2017, 26.

93. BCBS 2017, 24–25, 27.

94. The Wolfsberg Group 2017a.

95. The FBAs include the Board of Governors of the Federal Reserve System, the Federal Deposit Insurance Corporation, the National Credit Union Administration, and the Office of the Comptroller of the Currency.

supervisory expectations and enforcement processes.[96] It clarified that there is no "general requirement" of KYCC. Further, it emphasized that the FBAs' supervisory approach is risk-based and that remediation and enforcement actions are proportionate to the deficiencies uncovered. In particular, it emphasized that the largest fines "generally involved a sustained pattern of serious violations" and that criminal prosecutions are "typically brought … only when there is sufficient evidence of willful wrongdoing."[97]

It is unclear whether the Treasury's fact sheet has moved banks to modify their policies, however. Shortly after its publication, Sullivan & Cromwell, an international law firm whose practice includes AML and Office of Foreign Assets Control (OFAC) compliance, argued that the fact sheet may not provide banks with sufficient reassurance, for two reasons. First, it noted that the signatories to the fact sheet did not include the US Department of Justice, state-level banking authorities, or state and local criminal authorities—three additional constituencies with the power to enforce Bank Secrecy Act (BSA) / AML and OFAC violations.[98] Second, the memo noted the fact sheet's frequent use of qualifying language to describe enforcement actions (e.g., "generally involved," "typically brought," etc.).[99] The memo concluded that "the Fact Sheet may not serve as a sufficient basis for US banks to change their views concerning enforcement risk associated with BSA/AML and OFAC lapses."[100]

Soon after the Treasury issued its fact sheet, the Office of the Comptroller of the Currency (OCC) published revised correspondent banking guidance.[101] The guidance focused mainly on how banks should periodically review and reassess their foreign CBRs. It encouraged banks to have systems in place to conduct such reviews, to communicate their expectations to their respondent banks, and to make decisions to maintain or terminate CBRs on a case-by-case basis, informed by a rigorous assessment of the risks inherent in the relationship. Finally, the OCC advised that if banks do choose to terminate a relationship, they should generally provide the respondent bank with notification in time for it to make alternative arrangements.

Emphasis on Transparency and Informal-Sector Risk

In public forums, FATF now routinely acknowledges the danger of pushing money laundering and terrorist financing (ML/TF) risk into informal channels. Speaking in mid-2017, Santiago Otamendi, FATF's president, noted that de-risking "may lead to financial exclusion and an increase in the risks of money laundering and terrorist financing faced by societies, indirectly encouraging the use of cash and informal or nonregulated channels."[102] More recently, David Lewis, FATF's executive secretary, said that de-risking may "force financial transactions underground which, in turn, introduces higher risk and less transparency into the global financial system."[103]

96. US Department of the Treasury, et al. 2016.

97. US Department of the Treasury, et al. 2016, 3–4.

98. Sullivan & Cromwell LLP 2016b, 2.

99. Sullivan & Cromwell LLP 2016b, 5.

100. Sullivan & Cromwell LLP 2016b, 5.

101. Gardineer 2016.

102. Otamendi 2017.

103. Lewis 2017.

These comments have been echoed by senior officials at the International Monetary Fund, the World Bank, and the US Treasury, among others.

Prior to the publication of CGD's 2015 report, FATF had begun to acknowledge informal-sector risk in its guidance; however, it may still need to do more to operationalize this concept. When FATF's mandate was renewed in 2012, the ministers and representatives of its members issued a declaration recognizing the threat that financial exclusion can pose to effective AML/CFT implementation.[104] Further, since 2013, FATF's mutual evaluation methodology has allowed assessors to consider a country's level of financial exclusion among the factors that may influence the effectiveness of its AML/CFT regime.[105] The 2015 CGD report acknowledged these changes but questioned what they meant in practice: "It is not clear whether some amount of increased risk in the formal financial sector is acceptable if it is a consequence of a larger decrease in risk in the informal sector."[106]

FATF's MTO guidance does emphasize informal-sector risk as a reason for applying the RBA judiciously. The guidance is explicit that financial inclusion and financial integrity are complimentary goals: "Bringing customers into the regulated sector … will potentially reduce overall ML/TF risk in the financial system."[107]

Simplified Due Diligence and Overcompliance

In late 2017, FATF updated its financial inclusion guidance to include a new supplement on simplified due diligence.[108] The new supplement provides examples of countries that have applied simplified due diligence to accommodate financial inclusion goals, including through the use of digital ID systems, such as biometric IDs, and digital financial services, such as mobile money. The rest of the guidance, last updated in 2013, remained unchanged.

FATF has begun to address overcompliance in its guidance but could do more. In its 2013 financial inclusion guidance, it warned that overcompliance "could exacerbate financial inclusion risk, thereby increasing overall ML/TF risk."[109] More recently, in its 2016 guidance on money or value transfer services (MVTSs—the term FATF prefers for MTOs), FATF acknowledged that financial institutions sometimes "go beyond the requirements of relevant laws and regulations" in ways such as not applying simplified due diligence measures where allowed or closing customer accounts. It recommended that where supervisors observe overcompliance, they should advise banks on the RBA's flexibility and what measures are appropriate to the situation.[110] However, FATF does not address overcompliance in either its correspondent bank guidance or its NPO guidance. Nor does it mention overcompliance explicitly in either its recommendations or its mutual evaluation guidelines.

104. FATF 2012.

105. FATF 2017d, 7, 132.

106. CGD Working Group 2015, 47.

107. FATF 2016b, 17.

108. FATF 2017b.

109. FATF 2017b, 44.

110. FATF 2016b, 42 and 46.

The RBA for NPOs and Recommendation 8

The 2015 CGD report called on FATF to revise its Recommendation 8, which designated NPOs as high in risk.

In June 2016, FATF revised Recommendation 8 and its interpretive note, removing the assertion that NPOs are "particularly vulnerable" to terrorist financing.[111] In doing so, FATF recognized that "NPOs provide a range of vital services in our society, in particular for vulnerable communities and often in high-risk regions."[112] It is therefore important, FATF concluded, that the implementation of Recommendation 8 "not disrupt or discourage legitimate nonprofit activities."[113] The revised version of Recommendation 8 directed countries to apply the RBA to NPOs.[114] The accompanying revised interpretive note, likewise, was explicit that "not all NPOs are inherently high risk (and some may represent little or no risk at all)."[115]

The US government has acknowledged that not all NPOs are equally vulnerable to terrorist financing. The Treasury's 2015 *National Terrorist Financing Risk Assessment* stated that "the extent of TF risk for charitable organizations in the US varies dramatically depending on [the organizations'] operations and activities."[116] It further noted that the sector's vulnerability to terrorist financing had been curtailed in recent years, thanks to sustained efforts by both the US government and the NPO sector.[117] Further, in 2016, Jennifer Fowler, then Deputy Assistant Secretary of the Treasury for Terrorist Financing, stated, "Treasury does not view the charitable sector as a whole as presenting a uniform or unacceptably high risk of money laundering, terrorist financing, or sanctions violations."[118]

However, US government regulations do not yet reflect the position that not all NPOs are at high risk of terrorist financing. Eckert, Guinane, and Hall argue that the original Recommendation 8 "became embedded in various policies in the US and around the world" and that "the misperception that NPOs are 'particularly vulnerable' still lingers today."[119] Perhaps most importantly, the Bank Secrecy Act Anti–Money Laundering Examination Manual[120] has not been updated to reflect the revisions to Recommendation 8.[121] The manual is scheduled for revision in 2018.

---

111. FATF 2016d.

112. FATF 2016d, "Revision of FATF Recommendation 8 and its interpretive note to protect non-profit organizations from terrorist financing abuse," para. 1.

113. FATF 2016d, "Revision of FATF Recommendation 8 and its interpretive note to protect non-profit organizations from terrorist financing abuse," para. 2.

114. FATF 2016c, 55.

115. FATF 2016c, 56.

116. US Department of the Treasury 2015, 36.

117. US Department of the Treasury 2015, 41.

118. Fowler 2016.

119. Eckert, Guinane, and Hall 2017, 16.

120. FFIEC 2018.

121. Eckert, Guinane, and Hall 2017, 98.

New Recommendation

Table 10. New Recommendation	
Organization	**Recommendation**
National regulators	Provide more training to bank examiners on how to properly assess the risks of MTOs and NPOs. Clarify regulations and bank examination manuals as appropriate to reflect a proportionate RBA.

Table 11. Relevant Guidance and Regulatory Clarifications by International Standard-Setting Bodies, National Regulators, and Industry Bodies, 2014 to mid-2018

Organization	Title	Date Published/ Updated	Notes
US Comptroller of the Currency	Statement on the Risk Management Associated with Money Services Businesses (Gardineer 2014)	November 2014	Clarification of regulatory expectations
US Department of the Treasury—Financial Crimes Enforcement Network	FinCEN Statement on Providing Banking Services to Money Services Businesses (FinCEN 2014)	November 2014	Clarification of regulatory expectations
FATF	Best Practices on Combating the Abuse of Non-profit Organisations (Recommendation 8) (FATF 2015a)	2015	New guidance
US Federal Deposit Insurance Corporation	Statement on Providing Banking Services (FDIC 2015)	January 2015	Clarification of regulatory expectations
The Clearing House	Guiding Principles for Anti–Money Laundering Policies and Procedures in Correspondent Banking (The Clearing House 2016)	2016	2002 guidance for US-based correspondent banks updated to reflect new regulations and industry practices
FATF	FATF Guidance: Correspondent Banking Services (FATF 2016a)	2016	New guidance
FATF	Guidance for a Risk-Based Approach: Money or Value Transfer Services (FATF 2016b)	2016	New guidance
UK Financial Conduct Authority	De-risking: Managing Money Laundering Risk (FCA 2016)	February 2016	Clarification of regulatory expectations
US Department of the Treasury—Financial Crimes Enforcement Network	Guidance on Existing AML Program Rule Compliance Obligations for MSB Principals with Respect to Agent Monitoring	March 2016	New guidance

(continued)

Table 11. Continued

Organization	Title	Date Published/ Updated	Notes
Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, National Credit Union Administration, US Comptroller of the Currency, and US Department of the Treasury	Joint Fact Sheet on Foreign Correspondent Banking: Approach to BSA/AML and OFAC Sanctions Supervision and Enforcement (Board of Governors of the Federal Reserve System et al. 2016)	August 2016	Clarification of regulatory expectations
US Comptroller of the Currency	Risk Management Guidance on Periodic Risk Reevaluation of Foreign Correspondent Banking (Gardineer 2016)	October 2016	New guidance
BCBS	Guidelines: Sound Management of Risks Related to Money Laundering and Financing of Terrorism (BCBS 2017)	June 2017	2014 guidance updated to include revisions to the following: ■ Annex II—Correspondent Banking ■ Annex IV—General Guide to Account Opening
Wolfsberg Group	Correspondent Banking Due Diligence Questionnaire (The Wolfsberg Group 2017c)	October 2017	Standardized questionnaire (first published in 2004) last updated in 2014 to reflect international correspondent banks' evolving due diligence information requirements for respondent banks
FATF	FATF Guidance: Anti–Money Laundering and Terrorist Financing Measures and Financial Inclusion—with a Supplement on Customer Due Diligence (FATF 2017b)	November 2017	2013 guidance updated to include new supplement on customer due diligence
FATF	FATF Guidance: Private Sector Information Sharing (FATF 2017c)	November 2017	New guidance

4 RECOMMENDATION 4 OF THE 2015 REPORT:

Improve compliance and clarify indicators of lower risk

Introduction

The 2015 CGD report recognized that money transfer operator (MTO) and nonprofit organization (NPO) anti–money laundering and countering the financing of terrorism (AML/CFT) compliance was uneven, and that some organizations in these sectors needed to improve their compliance practices. At the same time, the report drew attention to the fact that regulators did not always treat MTOs and NPOs in a manner that was proportionate with their risk profiles.

Figure 4. Recommendation 4: Problem Identification and Solution Formulation

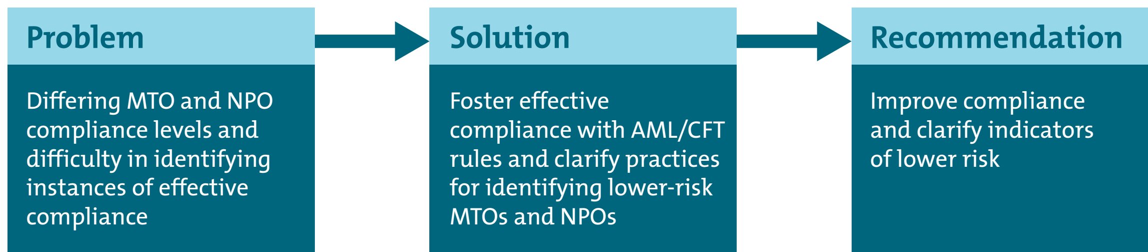


Table 12. Recommendation 4: Summary

Organization	Recommendation	Outcome (as of Mid-2018)
NPOs and MTOs	Improve compliance procedures where necessary to ensure that risks are mitigated effectively and efficiently	In the United States, NPOs were assessed in 2015 to have markedly improved their compliance practices, according to the National Risk Assessment. Regulators have also sought to highlight the degree to which supervision of MTOs has increased in recent years. In the UK, NPOs were recently assessed to have improved their compliance procedures. The sector as a whole is judged "low risk." However, MTOs are believed to be a higher risk now than they were two years ago.
Financial Action Task Force (FATF)	Provide greater clarity on the likely indicators of lower-risk MTOs and NPOs, and national governments and industry participants should collaborate to reflect this guidance with best practice documents	FATF has provided explicit guidelines on indicators of lower-risk MTOs. Its guidance on NPOs also describes indicators of higher and lower risk.

Evidence of MTOs' and NPOs' Improved Supervision and Compliance Procedures

The US NPO sector is judged to have reduced its terrorist financing (TF) risk in recent years. As noted in the previous section, the 2015 National Terrorist Financing Risk Assessment reported that the sector's vulnerability to terrorist financing had been curtailed in recent years, thanks to sustained efforts by both the US government and the NPO sector.[122]

Supervision of US MTOs has increased in recent years. In 2016, the Conference of State Bank Supervisors (CSBS) and the Money Transmitter Regulators Association co-published a white paper that detailed how states regulate MTOs and how their supervision of this sector has been enhanced in recent years.[123] The paper was praised by Jamal El-Hindi, then Deputy Director of FinCEN, for demonstrating the states' "extensive licensing and examination efforts."[124]

In the US, efforts are being made to enhance supervisory coordination among states and between states and the federal government. These coordination initiatives, which are actively supported by the U.S. Treasury, include the Multi-State MSB Examination Task Force and the Federal Financial Institutions Examination Council. They also include the Money Remittance Improvement Act of 2014, which allows the Treasury to rely on the examinations of state supervisors if certain criteria are met. Finally, the CSBS has introduced a new system designed to streamline regulatory reporting for MTOs.

In the United Kingdom, the NPO sector is judged to have low overall money laundering (ML)/TF risk. In its 2017 *National Risk Assessment of Money Laundering and Terrorist Financing* (NRA), HM (Her Majesty's) Treasury downgraded the sector's TF risk, which had been rated "medium-high" in the previous NRA.[125] The NRA praised charity regulators' close work with both nonprofits and law enforcement through means including outreach and risk-management guidance.[126]

The ML/TF risk of the UK's money services business (MSB) sector has deteriorated, however. In its 2017 NRA, HM Treasury raised its ML risk from "medium" to "high." The NRA recalled that the previous assessment had found poor compliance with AML regulations, and it noted that compliance had not changed in the subsequent two years. UK law enforcement regards MSBs as a key conduit for cross-border money laundering.[127] The sector's TF risk rating remains "high." The report did note that the largest MSBs tend to have robust ML/TF risk controls but the many smaller ones generally do not.[128]

122. US Department of the Treasury 2015, 41.

123. CSBS and MTRA 2016.

124. El-Hindi 2016, 2.

125. The sector's ML risk was not assessed in the 2015 NRA. Certain NPO subsectors are still considered a high TF risk—namely, the subset of charities operating internationally in conflict zones such as Iraq and Syria. See HM Treasury et al. 2017, 73.

126. HM Treasury et al. 2017, 74–75.

127. HM Treasury et al. 2017, 68.

128. HM Treasury et al. 2017, 71–72.

Guidance on Indicators of Lower-Risk MTOs and NPOs

FATF's revised MTO guidance specifies indicators of lower-risk MTOs. In February 2016, FATF issued a revised *Guidance for a Risk-Based Approach: Money or Value Transfer Services*, first published in 2009. The guidance encourages banks and regulators to take a risk-based approach toward dealing with MTOs (which FATF calls money or value transfer services, or MVTSs). It states that although some MTOs may be used for ML/TF, "this should not necessarily result into the categorization of all MVTS providers as inherently high [in] ML/TF risk."[129] The guidance describes some of the factors it believes lower an MTO's ML/TF risk, including operating only domestically or in foreign countries that are either compliant with FATF standards or otherwise low in risk. In addition, MTOs that have a long operational history and are transparent in their payment messages are considered to be at lower risk. Finally, the guidance included an appendix with a longer a list of indicators that could be used to identify lower-risk MTOs (see Box 2).

The United States has not issued guidance to reflect the new FATF guidance.

Box 2. FATF List of Characteristics of Lower-Risk MVTSs

Characteristics that may factor into lower-risk MVTSs may be as follows:

- Registered/licensed with annual audits and regulatory exams
- Publicly traded or well capitalized
- Stable track history with substantial infrastructure.
- Established AML/CFT program
- Ability to quickly and accurately provide customer-specific information (i.e., transaction logs)
- Direct interaction with consumers (as opposed to nested wholesalers or large commercial transactions)
- Low-dollar domestic consumer-based transactions (non-cross-border)
- Low-dollar cross-border consumer remittances
- Licensed agents monitored by licensed parent
- Established and transparent network of counterparties (foreign)
- A small number of known, regular customers with a pattern of repeat microtransactions often linked to a pay or salary cycle with senders and recipients normally linked by family ties

Note: Reproduced from FATF 2016b, 66.

129. FATF 2016b, 5.

FATF's 2015 best practices guidance, *Best Practices: Combating the Abuse of Non-profit Organisations (Recommendation 8)*[130] does lay out indicators of higher and lower risk. Although FATF has not published a discrete list of indicators of lower-risk NPOs, as it has done for MTOs, it continues to engage the private sector in forums and other meetings.

New Recommendations

Table 13. New Recommendations

Organization	Recommendation
National Regulators	Continue to conduct outreach and work with affected sectors to ensure they understand regulators' compliance expectations
FATF	Consider whether to publish a consolidated list of indicators of lower-risk NPOs

130. FATF 2015a.

5 RECOMMENDATION 5 OF THE 2015 REPORT:

Facilitate identification and lower the costs of compliance

Introduction

The 2015 CGD report recognized client identification challenges as a major driver of anti–money laundering and countering the financing of terrorism (AML/CFT) compliance costs. It backed a series of technical initiatives to improve the identification of natural persons and legal entities in customer onboarding and payments facilitation.

Figure 5. Recommendation 5: Problem Identification and Solution Formulation

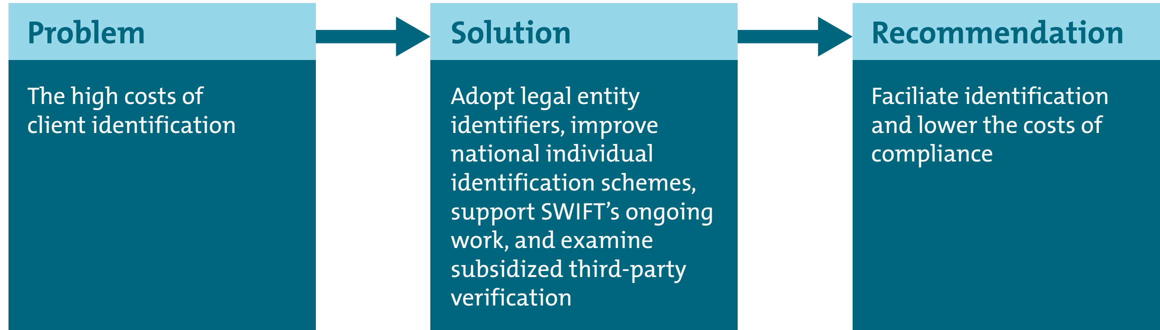


Table 14. Recommendation 5: Summary

Organization	Recommendation	Outcome (as of Mid-2018)
National governments	Provide citizens with the means to identify themselves in order to make reliably identifying clients possible for financial institutions and other organizations	At least 175 jurisdictions have some type of national ID system in place, of which 161 are digitized and 83 collect fingerprint or iris biometrics. However, coverage is low in many developing-country jurisdictions.
National governments	Ensure that appropriate privacy frameworks and accountability measures support these identification efforts	Most of these countries have also enacted related data protection laws
Banks and other financial institutions	Redouble efforts to develop and adopt better messaging standards and implement know-your-customer (KYC) documentation repositories	Both the Payments Market Practice Group and the Wolfsberg Group issued messaging standard guidelines in 2017. Uptake for KYC utility services is significant and growing.
Banks and the Financial Stability Board	Accelerate the global adoption of the legal entity identifier scheme	More than 1.2 million entities have registered for LEIs but mostly in advanced economies. Uptake in developing countries has been low.
World Bank	Convene all relevant entities to review the possibility of donor-subsidized third-party verification for unprofitable clients	The World Bank has been exploring the possibility of establishing a repository for customer due diligence information on nonprofit organizations.

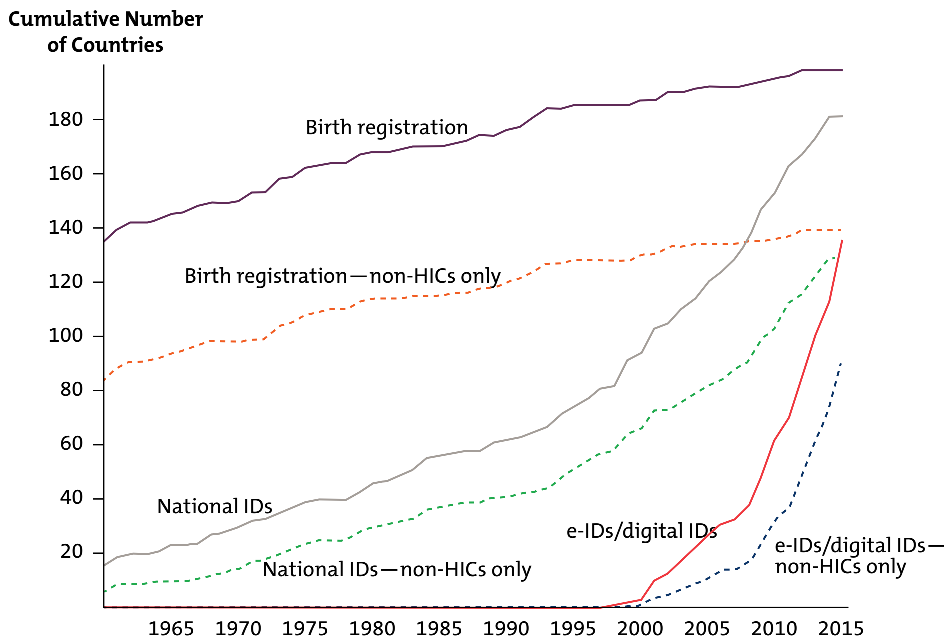
Individual Identification Schemes, Biometrics, and e-KYC

The 2015 report encouraged national governments to implement national identification systems robust enough for know-your-customer (KYC) purposes. The report argued that such systems were within reach for "the vast majority of countries," pointing to the successful rollout of India's biometric ID system, Aadhaar, along with "weaker identification systems" for registering SIM cards in 37 other countries. At the same time, the report stressed the necessity of pairing such ID systems with strong privacy frameworks and accountability measures to ensure that participants' privacy rights are not violated.[131]

When customers lack formal identification, financial institutions cannot easily verify their identities or conduct due diligence on them. For example, the International Monetary Fund (IMF) has reported that money transfer operators in the Pacific Islands struggle to perform customer due diligence (CDD) because their countries do not have national identification systems in place.[132] This difficulty adds to the cost of KYC and reduces the incentive to provide banking for low-income customers.

National ID systems can reduce the "identification gap" that exists in many developing countries. This, in turn, should make it easier for banks and money transfer operators (MTOs) to conduct customer identification, verification, and due diligence on their direct customers.

Figure 6. Number of Identification Programs



Notes: Reproduced from Gelb and Metz 2018, 17. HIC = high-income country.

131. CGD Working Group 2015, 53.

132. IMF 2017, 50.

Box 3. Biometric Authentication

Biometric authenticators use distinctive physiological or behavioral characteristics to ensure that registered identities are unique, in order to control a person's access to a system. A number of characteristics can be used, the most common of which are fingerprints, iris patterns, and facial features. Voice recognition is also becoming widely adopted in call centers.[a]

Compared with other "authentication factors," such as passwords, PINs, cards, and tokens, biometrics are, for the most part, more secure and easier to use. Biometrics are among the most secure and robust authenticators. Biometric fraud requires the fraudster to obtain the user's biometric trait and, in the case of mobile-enabled systems, the device on which the user enrolled (a type of multifactor authentication).[b] In addition, unlike knowledge- or token-based authenticators, biometrics cannot be lost or forgotten. The accuracy and security of biometric systems can be enhanced through the use of *multilayered* or *multifactor* authentication. Biometrics do introduce new vulnerabilities, however—for example, they cannot be reissued and they cannot be compared when encrypted.

Biometrics are now an affordable, mature, and widely used technology. According to a report by PA Consulting Group to the UK FCA (Financial Conduct Authority), the use of biometrics in AML and KYC has become commonplace in recent years, and ... biometrics are now regarded [as] "one of the most mature and instantly useful elements of technology in AML."[c]

Note: Adapted from Woodsome and Ramachandran 2018, 70–81.
a. Lott 2015, 28.
b. Lovisotto et al. 2017, 3.
c. PA Consulting Group 2017, 19.

Most countries now have some form of national ID, most of which are digitized and many of which employ biometric authentication. The World Bank's Identification for Development (ID4D) initiative reports that as of mid-2018, 175 of 196 jurisdictions had some type of national ID system in place, of which 161 were digitized and 83 collected fingerprint or iris biometrics.[133] (See Box 3 for a brief primer on biometrics.) Some of these systems were rolled out very quickly, such as Tanzania's voter ID in 2015 and Malawi's national ID in 2017. According to the International Telecommunications Union, a UN agency, many of these countries have passed data protection laws to address privacy concerns, although these laws have not necessarily alleviated citizens' suspicions.[134]

Identification gaps remain, however, especially in low- and lower-middle-income countries. In some jurisdictions, coverage is low. The World Bank estimates that up to a billion people still lack a formal ID, of whom 63 percent live in lower-middle-income countries and another 28 percent live in low-income countries. The

133. World Bank 2018c.
134. Focus Group on Digital Financial Services 2016, 30.

poor and women are disproportionately likely to lack ID.[135] A substantial number are children without birth certificates. This gap is partly the result of the high fees charged for IDs in some countries, along with the difficulty of obtaining the necessary supporting documentation (many ID systems do not enroll residents at birth).

Some governments now allow banks to integrate with their national ID systems in order to digitally verify their direct customers' identities. This process, known as electronic KYC (eKYC), can be faster, less expensive, and more reliably accurate than paper-based KYC. The systems are relatively secure, and privacy risks are limited if functionality is limited to authenticating customers' identities. However, privacy challenges may be raised if such systems allow for the sharing of personal data with third parties—for example, to auto-fill an electronic form with personal information. (See Box 4 for more details on e-KYC.)

National identifiers cannot help correspondent banks identify indirect customers (a function known as "know your customer's customer," or KYCC), as they are unlikely to be included in payment messages anytime in the foreseeable future. However, the use of robust identifiers, particularly if they employ biometric authentication, by respondent banks, MTOs, and nonprofit organizations (NPOs) may enhance correspondent banks' confidence in the AML/CFT controls of these counterparties.[136]

Work is needed to develop an internationally recognized or interoperable digital identification system for natural persons who engage in financial transactions. As remote interactions increase, especially internationally, there is increasingly a need to explore developing a digital identification system for individuals that works across borders. Such a system could dramatically reduce financial institutions' KYC costs.[137] But despite the proliferation of ID systems (biometric and otherwise), they remain fragmented, typically along jurisdictional lines—financial institutions have no common way of identifying individuals across jurisdictions.[138]

A global system for the identification of natural persons could borrow certain design elements from the legal entity identifier (LEI) but would likely differ in other respects. Such an identifier could use a code structure similar to the LEI's.[139] It could also adopt a federated system, similar to the Global Legal Entity Identifier System (GLEIS), operated by the Global Legal Entity Identifier Foundation (GLEIF)—such as a "Global Natural Persons Identifier System" (GNPIS) run by a "Global Natural Persons Identifier Foundation" (GNPIS).[140] However, a natural-persons identifier would require a different reference data set than that required by the LEI. In addition, the database would not be public, as it is for the LEI. A GNPIS would work best if it were made to be interoperable with GLEIS. The ability to cross-link identifiers across the two systems would enable relationships between individuals and businesses to be accurately recorded.[141]

135. Desai, Diofasi, and Lu 2018.

136. World Bank 2018a, 23.

137. Wolf 2017, 7.

138. Wolf 2017, 4.

139. Wolf 2017, 5.

140. Wolf 2017, 9.

141. Wolf 2017, 8–9.

Box 4. E-KYC

Electronic KYC (e-KYC or eKYC) refers to digital customer identification and verification procedures. It is generally discussed in the context of KYC for natural persons. E-KYC is most effective when connected in real time to a national ID system that uses biometric authentication[a]

The most prominent and frequently discussed example is India's Aadhaar e-KYC service, but more and more countries are introducing their own systems. These include Colombia, Estonia, Malaysia, Pakistan, Peru, Singapore, and Thailand, among others.

E-KYC can be faster, less expensive, and more reliably accurate than paper-based KYC. For example, e-KYC in India has reduced the time it takes for a bank to verify a new customer's identity (and subsequently to onboard the customer and activate the new account) from two to four weeks to less than a minute.[b] Moreover, it has been estimated that e-KYC in India could generate direct cost savings of more than $1.5 billion over the next five years.[c] Finally, as the Financial Action Task Force has argued, e-KYC could reduce the need for simplified due diligence, which is necessitated by low-income and/or rural customers' lack of supporting ID documentation.[d]

Policymakers and standard-setting bodies are expressing interest in e-KYC. FATF has stated that "the developments on the digitalization of national ID systems and availability of e-KYC can facilitate smooth, low-cost, and reliable ID identification and verification."[e] Similarly, the Financial Stability Board has mentioned e-KYC among financial and regulatory technologies "that may have the potential to directly address the drivers of de-risking."[f] India's Aadhaar e-KYC service has been mentioned favorably by the Bank for International Settlements and the G20 Global Partnership for Financial Inclusion, among others.[g]

Although the promise and potential of e-KYC is widely recognized, a number of issues need to be addressed. These include better coordination among stakeholders, inconsistent regulations, overcompliance, and technical and financial hurdles. The FATF has observed the following about e-KYC:

> Although a number of countries have initiatives in this area, a substantial impact is yet to be seen. The lack of ongoing dialogue between relevant stakeholders has led to situations where there is almost complete coverage with digital IDs (including for the poor and disadvantaged), but financial institutions still need to require a broad range of documents for customer identification and identity verification (ex. letter from employer). Moreover, in some contexts there is a need for interagency dialogue not only on the legal framework for using national IDs but also on the technical and financial conditions for financial institutions to be able to perform e-KYC.[h]

Moreover, e-KYC systems do not provide all of the information a bank might need in order to conduct due diligence on a customer, such as whether a business is legitimate or where the customer's money is coming from.

Data security and privacy controls are issues that still need to be fully addressed, particularly for e-KYC systems that allow sharing of personal information with third parties. For example, India's Aadhaar system suffered a major scandal in early 2018 when the *Tribune*, an Indian English-language newspaper, revealed the ease with which the Aadhaar database could be illegally accessed—and fraudulent ID cards printed out.[i] The breach was made possible by lax controls on access given to the private Aadhaar registration providers, who numbered in the tens of thousands. The Unique Identification Authority of India, the government agency responsible for administering Aadhaar, has been working to tighten security in response. Privacy risks are more limited if functionality is limited to authenticating customers' identities.

a. Oliver Wyman and MicroSave 2017, 18.
b. Oliver Wyman and MicroSave 2017, 18 and 23.
c. Oliver Wyman and MicroSave 2017, 23.
d. FATF 2017b, 27.
e. FATF 2017b, 29.
f. FSB 2018c, 32.
g. BIS and World Bank 2015, 34; GPFI 2017, 7.
h. FATF 2017b, 29.
i. *The Economist*, 2018.

Interoperability may be preferable to a centralized solution. Gerard Hartsink, Chairman of GLEIF, has warned that the "creation of a global register for natural persons is not recommended because of data-protection challenges."[142] Such a system could function either as a network of bilateral information exchanges between countries or as a translator. An interoperable system could function in a manner similar to the International Civil Aviation Organization's machine-readable travel documentation system, which allows for interoperability between national passport systems.[143]

The International Organization for Standardization (ISO) is considering how best to move forward on the development of an internationally recognized identification standard for natural persons. This work is in its initial stages. ISO is currently determining whether it could adapt an existing ISO standard for this purpose, or whether it would have to develop a new standard.[144] Stephan Wolf, CEO of GLEIF and co-convener of ISO's Fintech Technical Advisory Group, writes, "Substantial discussion would be required to determine whether such a standard is appropriate, what are the necessary elements for identification, who should serve as the registrar(s) for the identification, how the data should be managed, and the terms under which it could be made available."[145]

KYC Utilities and Third-Party Verification[146]

The 2015 report backed the development of KYC utilities to reduce banks' onboarding costs. KYC utilities are central repositories for CDD information. They take in, cross-check, organize, and store customer data and documentation, which member banks can use to perform their own background checks and risk assessments. By consolidating the exchange of CDD information, KYC utilities can reduce duplicative efforts, shorten the onboarding process, and lower industrywide compliance costs.[147]

Several commercial KYC utilities were launched in 2014 and 2015. These focus on institutional clients, such as banks and nonfinancial corporations. More recently, a number of governments around the world have launched KYC repositories for individual residents. These systems usually build on digital national ID systems and are commonly referred to as e-KYC.

Of the three sectors discussed in this report, correspondent banking is the only one that is currently served by an operational KYC utility. The SWIFT KYC Registry, which launched in late 2014, services the correspondent banking sector. As of

142. Hartsink 2018.

143. Conversation with Alan Gelb, July 2018.

144. Wolf 2017, 5.

145. Wolf 2017, 4.

146. Adapted in part from Woodsome and Ramachandran 2018, 11–23

147. The potential efficiency gains are greatest in sectors in which clients typically maintain accounts with more than one bank. For example, according to the Committee on Payments and Market Infrastructures, "the 7,000 banks that use the SWIFT network for correspondent banking have more than 1 million individual relationships, so the number of documents exchanged [for CDD] is presumably much higher," leading to "a massive exchange of documents" (CPMI 2016, 19).

mid-2017, it had signed up more than 4,500 financial institutions in more than 200 jurisdictions, including 60 central banks.[148] As far as the authors of this report have been able to determine, there is no KYC utility geared toward MTOs.

International policymakers are generally favorable toward KYC utilities. In its 2016 report on correspondent banking, the Committee on Payments and Market Infrastructures (CPMI) stated that KYC utilities "could be supported in general as an effective means of reducing the burden of compliance with customer due diligence requirements for banks active in the correspondent banking business."[149] The Financial Stability Board (FSB) incorporated the CPMI's recommendations on KYC utilities into its action plan to address the decline of correspondent banking.[150] These recommendations included clarifying international guidance on banks' use of KYC utilities and standardizing the information that they use.

In line with the CPMI's recommendations, international standard-setting bodies have updated their guidance to address correspondent banks' appropriate use of KYC utilities. In its revised guidelines on managing AML/CFT risk, the Basel Committee on Banking Supervision (BCBS) has provided detailed guidance on the use of KYC utilities, including the extent to which correspondent banks can rely on them.[151] The guidance states that as a matter of policy, "supervisors see in principle no objection to the use of [KYC] utilities in correspondent banking risk assessment processes," provided that certain conditions are met and that the correspondent bank understands it retains ultimate responsibility for CDD.[152] Regarding the extent to which correspondent banks can rely on the information provided by KYC utilities, the guidance explains that the level of risk will determine whether the correspondent bank needs to independently verify or augment the information it receives from the KYC utility.[153] Finally, the guidance provides a list of factors banks should consider when assessing the validity of information provided by the utility, such as the source of the information, how often it is updated, and whether the data pass quality checks.[154] Similarly, the Financial Action Task Force (FATF) mentioned KYC utilities in its 2017 guidance on private-sector information sharing. Both the BCBS and the FATF guidance emphasized that although banks may use KYC utilities for information gathering, CDD is still ultimately their responsibility.

The Wolfsberg Group recently updated its Correspondent Banking Due Diligence Questionnaire, which could serve as a template for the baseline data set for KYC utilities that service the correspondent banking sector.[155] First issued in 2004 and

---

148. Interview with Bart Claeys, head of KYC Compliance Services, SWIFT, September 8, 2017.

149. CPMI 2016, 4.

150. FSB 2016a, 19

151. According to the FSB, this fulfills the G20's commitment to clarify international regulatory expectations with respect to KYC utilities. See FSB 2017b, 2.

152. BCBS 2017, 27.

153. BCBS 2017, 34.

154. These include whether the information is sourced, when it was last updated, whether and when the utility verified the information with the source, and whether the information the utility provides is reliable, as judged by periodic data checks by the bank. See BCBS 2017, 34–35.

155. Interview with Bart Claeys, September 8, 2017.

slightly modified in 2014, the questionnaire provides a standardized set of questions for correspondent banks to ask prospective respondent bank clients. The original questionnaire included 27 questions (one more question was added in 2014, for a total of 28) and was intended to serve as "a 'minimum' question set."[156] The updated questionnaire includes 110 questions (not including subquestions) and is intended to be sufficient in most circumstances, minimizing the need for banks to supplement with further questions.[157] Subsequent to the questionnaire's release, the Wolfsberg Group's members—which include 13 global banks—announced that they would be adopting the questionnaire as their new standard.[158] In October 2017, SWIFT announced that it had aligned its information baseline with the new questionnaire as well.[159] In March 2018, the BCBS, CPMI, FATF, and the FSB released a joint statement welcoming the questionnaire, noting that, in part, it "may help … foster better standardization of core information through KYC utilities."[160]

US authorities have not yet publicly commented on KYC utilities. The American Bankers Association (ABA) has recently recommended that the US Department of the Treasury's Financial Crimes Enforcement Network (FinCEN) issue guidance validating the use of third parties for customer identification and due diligence, including "clear parameters" for when banks may rely on CDD information provided by third parties. It has further "urg[ed] Treasury to support [the efforts of KYC utilities] and help eliminate resistance on the part of banking regulators."[161]

National authorities need to provide guidance on the use of KYC utilities. Commercial KYC utilities were developed in response to market demand, which suggests that they are viable even in the absence of more explicit regulatory backing. However, many observers believe that if their efficiency gains are to be fully realized, banks will have to rely on them more fully. In the absence of clarification about legal responsibilities, there could be confusion and miscoordination.

Less work has been done on KYC utilities for other sectors affected by de-risking, including nonprofits and remittances. For nonprofits, the World Bank and the Association of Certified Anti–Money Laundering Specialists (ACAMS) are investigating the possibility of establishing a repository for NPOs.[162] To the best of our knowledge, there is no KYC utility that caters to MTOs or other remittance service providers, although Bank Negara Malaysia, Malaysia's central bank, has also laid the regulatory groundwork for e-KYC, with a particular view toward improving the KYC process for remittance recipients.

156. The Wolfsberg Group 2017a.

157. The Wolfsberg Group 2017a.

158. The Wolfsberg Group 2017a.

159. SWIFT 2017.

160. For a detailed discussion of the Wolfsberg Group's new questionnaire, see FSB 2018a, 16–18. For the questionnaire itself and supporting documentation, see Wolfsberg Group 2018.

161. ABA 2017, 6–7.

162. Dutch Ministry of Finance, World Bank, and Human Security Collective 2018, p. 11

Legal Entity Identifiers[163]

The 2015 report called on financial institutions, the FSB, and national regulators to work together to accelerate the global adoption of the LEI. LEIs are unique 20-character alphanumeric codes assigned to legal entities that engage in financial transactions. They are often likened to bar codes for legal entities; their purpose is to precisely identify parties to financial transactions. LEIs are already mandated for a number of activities and are now being considered for use in KYC for direct clients—including respondent banks and MTOs—and for precisely identifying originators and beneficiaries in payments messages.

Although not originally intended for either payments or AML/CFT compliance, the LEI can be adopted for these purposes. The LEI was originally intended for micro- and macroprudential risk management, but its design is sufficiently flexible that it can serve as a general-purpose reference identifier, and its creators assumed that new use cases would arise over time. Although there is already a standard identifier for payments, the Business Identifier Code (BIC), it is not as precise as the LEI.[164] LEIs may help reduce false positives in sanctions screening applications and assist financial intelligence units in aggregating data from different sources, to serve as a starting point for KYC and to facilitate interoperability with other systems, including KYC utilities and other information-sharing arrangements.[165] They may one day help to identify payment originators and beneficiaries, bringing more transparency to international correspondent banking and fulfilling FATF Recommendation 16, which calls for such identification.[166]

A number of steps are being taken to promote the use of the LEI in payments and for correspondent banking. In its 2016 report on correspondent banking, CPMI recommended allowing LEIs to be included in current payment message formats on a voluntary basis, in order to identify the originator and beneficiary.[167] The BCBS has recommended obtaining the LEI during the onboarding process where available, and notes that the LEI's relationship mapping may aid in risk assessments by showing the subsidiaries and branches of respondent banks.[168] The revised Wolfsberg Group Correspondent Banking Due Diligence Questionnaire, for due diligence on onboarding respondent banks, includes a field for the respondent bank's LEI.[169]

SWIFT, the ISO-designated registration authority for BICs, and GLEIF have developed a BIC-to-LEI mapping process to make using the LEI easier. This tool allows banks to link the BIC, the standard identifier in payments messages, to the

163. Adapted in part from Woodsome and Ramachandran 2018, 57–69

164. In cross-border transactions for both financial and nonfinancial institutions, payment messages currently rely on BICs for account identification and routing destination (ABA 2015, 3). However, BICs are not ideal for unambiguous identification. Some legal entities may use more than one BIC, and in a few cases, a single BIC can be used by multiple entities within a group to send or receive transaction messages (SWIFT 2015, 4). By contrast, a legal entity may have only one LEI. For this reason, LEIs are superior to BICs for identifying transacting parties precisely, especially for risk management and compliance purposes, where error tolerance is low.

165. CPMI 2016, 24

166. CPMI 2016, 25

167. CPMI 2016, 39.

168. FSB 2018a, 19.

169. The questionnaire is available at https://www.wolfsberg-principles.com/sites/default/files/wb/Wolfsberg%27s_CBDDQ_140618_v1.2.pdf.

LEI without necessitating a change in current payment message formats. It also means that banks do not have to map the identifiers themselves—they can simply download the relationship file, which is publicly available.[170] The first relationship file was published in February 2018, and the files are being updated monthly.[171]

Stakeholders are currently discussing whether and how best to incorporate the LEI into current and future payment message formats. For legacy payment message formats (MT103 and MT202 COV), most stakeholders favor allowing banks to include the LEI as an optional value in the free-form field. Stakeholders are discussing whether to include an LEI field in the new ISO 20022 payment messages standard. In its new Transparency Standards, the Wolfsberg Group has stated its desire to see this dialogue continue, noting that greater transparency requires further adoption by small and medium-sized enterprises, as well as a solution for identifying natural persons.[172] The SWIFT Payment Market Practice Group has issued a proposal for the adoption of the LEI in both legacy payment messages and ISO 20022.

To date, more than 1.2 million LEIs have been issued worldwide,173 but more needs to be done to drive LEI adoption, particularly for developing countries and nonfinancial corporations. Regulatory requirements have been a major driver of LEI registration in the United States and the European Union.[174] However, fewer developing countries mandate the LEI's use, and so the pace of adoption is lower.[175] One exception is Mexico, whose central bank now requires all depository institutions (and their counterparties) to obtain an LEI, which is then linked to their tax ID number.[176] Other developing-country signatories to the LEI charter should look for ways to incorporate the LEI into their regulations, as appropriate.

LEI adoption may also be driven by the private sector. Although regulatory mandates have been an important driver of LEI registration in the first few years, financial institutions and nonfinancial corporations can also encourage or require their counterparties to register for LEIs. In addition, legal entities may independently decide that it is worthwhile to obtain an LEI. Where it is feasible, such organic growth, since it depends on legal entities' recognizing the LEI's value for themselves, may be more sustainable than regulatory mandates.[177]

In addition to low adoption rates, developing countries are also often hindered by lower-quality information. Business registries may contain partial or outdated information. This means local operating units have a greater challenge in verifying the data that is submitted, lengthening the registration process.[178]

170. Interview with Stephan Wolf, August 23, 2017.

171. They are available for download here: https://www.gleif.org/en/lei-data/lei-mapping/download-bic-to-lei-relationship-files.

172. The Wolfsberg Group 2017c, 8.

173. GLEIF 2018.

174. In particular, the recent surge in LEI registrations was driven by a January 2018 deadline to comply with a requirement under the European Securities and Market Authority's revised Markets in Financial Instruments Directive (MiFID II), which mandates LEIs for all entities trading across all asset classes in the European financial markets.

175. Interview with Paul Janssens, LEI programme director, SWIFT, August 21, 2017.

176. LEI ROC 2015, 13, Annex I:11; Wolf 2017.

177. Interview with Paul Janssens, August 21, 2017.

178. Interview with Paul Janssens, August 21, 2017.

Stakeholders are taking steps to increase LEI registrations. To promote LEIs among nonfinancial institutions, GLEIF began a campaign in April 2017 that encourages financing institutions to become "registration agents" of LEI issuers.[179] Such a step would allow banks to facilitate LEI applications on behalf of their customers. SWIFT recommends that all entities be required to create an LEI when joining a KYC utility.[180]

Messaging Standards

The 2015 report called on financial institutions to develop and adopt better payments messaging standards, with encouragement from the FSB and national regulators.[181] In the short term, the report maintained, "widespread adoption of the SWIFT MT202 COV messaging standard would increase the transparency of transactions through multiple intermediary institutions."[182] The report further encouraged stakeholders to regularly review messaging standards "to ensure that message integrity is maximized at a cost which does not undermine the incentives for banks to use messaging best practice." It endorsed ongoing discussions among public- and private-sector stakeholders about the future of cross-border interbank messaging.[183]

In its action plan to address the decline in correspondent banking relationships, the FSB similarly emphasized the importance of payments-message accuracy, noting that "improving the quality of payments messages should reduce the number of requests for information and associated costs, and more generally improve trust between the correspondent and the respondent."[184]

Specifically, for correspondent banks to effectively screen transactions, in compliance with AML/CFT regulations, payments messages must include accurate information on the originators and beneficiaries of the transfer. This is a requirement of FATF Recommendation 16.[185] It is especially important that this information be included when correspondent transactions are made indirectly through a chain of intermediaries (for background, see Box 6).

In the past two years, numerous efforts have been made to promote better adherence to payments-message accuracy and to begin mapping the future of cross-border payments messages. These efforts include the issuance of new or revised guidelines by the BCBS, the Payments Market Practice Group (PMPG), and the Wolfsberg Group.

First, in June 2017, the BCBS clarified its expectations regarding banks' responsibilities for ensuring payments-message accuracy. In its 2017 guidance on correspondent banking, the BCBS affirmed that its 2009 guidance on cross-border wire transfers, which focused on cover messages, applied to all payment message formats. In particular, originator banks are responsible for performing due diligence

179. FSB 2017b, 17.

180. SWIFT 2015, 4.

181. CGD Working Group 2015, 55.

182. CGD Working Group 2015, 55.

183. CGD Working Group 2015, 54.

184. FSB 2018a, 20.

185. FATF Recommendation 16, on wire transfers, states that "countries should ensure that financial institutions include required and accurate originator information, and required beneficiary information, on wire transfers and related messages, and that the information [remain] with the wire transfer or related messages throughout the payment chain." See FATF 2016c, 17.

on the payment originator, for selecting the appropriate message format, and for including the originator and beneficiary information in the payments message. Intermediary banks and beneficiary banks are responsible for checking that payments messages include originator and beneficiary information, and for conducting periodic checks as to the reliability of this information.[186]

Second, in May 2017, the PMPG issued market practice guidelines on the correct use of the SWIFT MT202 COV messaging format.[187] Originator banks use the MT202 COV format, which was introduced in 2009, when they choose to use the cover method for indirect correspondent payments (see Box 6). The PMPG's guidelines enumerate best practices, answer frequently asked questions, and make implementation recommendations.

Third, in October 2017, the Wolfsberg Group published additions to its payment transparency standards, which were first issued in 2007.[188] These additions specify what information originator banks should include on payments originators and beneficiaries, as well as how originator banks should deal with "on-behalf-of" payments.[189] The new standards also enumerate the responsibilities of intermediary and beneficiary banks and of MTOs, especially with regard to batched cross-border payments. Finally, the new standards offer qualified support for including the LEI in payments messages. The new standards are intended to be "forward looking and aspirational" in nature, given the constraints of legacy payments infrastructure. Nonetheless, the group urges their eventual adoption by all payments methods and platforms covered by FATF Recommendation 16, including those under development.

Box 5. Third-Party Verification of Clients' AML/CFT Risk Controls

The 2015 report also called for stakeholders to explore the possibility of allowing banks to rely on third parties for verifying that the AML/CFT risk controls of respondent banks and MTOs comply with global AML/CFT standards.[a] Although this concept remains in its nascent stages, at least one start-up, Sigma Ratings, is pursuing a business model of analyzing and rating potential clients and counterparties for AML/CFT risk.[b]

a. CGD Working Group 2015, 54.
b. https://sigmaratings.com.

186. BCBS 2017, 29.

187. PMPG 2017.

188. Wolfsberg Group 2017c.

189. An "on-behalf-of" payment is made by an entity on behalf of some other ultimate originator, such as when a law firm makes a payment on behalf of a client.

Box 6. Payment Message and Fund Flows in Correspondent Banking

In correspondent banking, there are three different methods for transmitting payment messages and settlement instructions (for the actual transfer of funds).

If the payment originator's bank (the respondent bank) has a direct relationship with the payment beneficiary's bank (the correspondent bank), then the payment can be sent directly from one bank to the other. In this case, the originator bank sends the payment message (which includes originator and beneficiary information) together with the settlement instructions, using the SWIFT MT103 message format.

However, if the originator bank does not have a direct relationship with the beneficiary bank, then the payment must instead be sent indirectly, via a chain of one or more intermediaries, sometimes in different jurisdictions. In this case, the originator bank has two options: the serial method and the cover method.

If the originator bank uses the serial method, it again sends the payment message and settlement instructions together using the MT103 message format. These are forwarded from one intermediary bank to the next until they reach the beneficiary bank.

If the originator bank uses the cover method, the payment message and settlement instructions are split up. The respondent bank sends the payment message directly to the beneficiary bank using the MT103 format, and separately, it sends the settlement instructions to the intermediary bank(s) using the MT202 COV message format.

The MT202 COV format, which was introduced in 2009, is a modified version of the MT202 format, the standard message format for interbank payments. The difference is that the MT202 COV format includes fields for originator and beneficiary information, whereas the original MT202 format does not. For this reason, banks are required to use the MT202 COV format when using the cover method to make correspondent payments.

All three transmission methods can be compliant with AML/CFT regulations if used correctly. However, if an originator bank uses the MT202 format when it should instead use the MT202 COV format, the intermediary banks in the payments chain may mistake the transfer for a standard interbank payment, unaware that information is missing.

Note: This box draws on the CPMI report Correspondent Banking (CPMI 2016). Readers who wish to know more should refer to pages 32–38 of that document.

New Recommendations

Table 15. New Recommendations for Individual Identification Systems	
Organization	**Recommendation**
National governments	Lower or eliminate fees that prevent residents from obtaining IDs
Standard-setting bodies and international organizations	Explore what steps are needed to develop an internationally recognized, interoperable digital identification system for natural persons engaging in cross-border financial transactions

Table 16. New Recommendations for KYC Utilities	
Organization	**Recommendation**
National regulators	Give further consideration as to whether and to what degree financial institutions can rely on third parties for customer identification and due diligence, and offer further guidance, if necessary. It is important that banks understand the degree to which they can rely on KYC utilities or other third-party information sharing mechanisms.
National regulators	Provide clarity on who bears (or is allowed to bear) liability if CDD information is incorrect
National regulators	Consider whether to establish regulatory regimes for regulating and monitoring KYC utilities
Standard-setting bodies, international organizations, industry groups, banks, MTOs, and NPOs	Work together to evaluate the utility of Wolfsberg-style standardized due diligence questionnaires for banks to use in the course of onboarding MTOs, and separately, NPOs. Such a questionnaire might help align expectations between banks and MTOs/NPOs (particularly smaller MTOs/NPOs) with regards to what information is required in order to open an account, and also to promote more consistent treatment. If there is broad consensus on the utility of such an approach, identify necessary next steps, possible information requirements, and what type of economic and regulatory support might be necessary.
Standard-setting bodies and international organizations	Continue to engage on developing issues related to KYC utilities
Standard-setting bodies and international organizations	Explore whether it is possible for third parties also to conduct risk assessments themselves, as opposed to simply providing information for risk assessments

Adapted from Woodsome and Ramachandran, 22.

Table 17. New Recommendations for LEIs

Organization	Recommendation
Standard-setting bodies	Determine whether LEIs can be used for customer identification, verification, and due diligence, and provide relevant guidance
National regulators in countries affected by de-risking	Look for ways to promote LEI issuance
National regulators in countries affected by de-risking	Improve business registries and other relevant information sources that local operating units use to validate information
Financial institutions	Help customers obtain LEIs, especially in countries affected by de-risking
Banks	Begin modifying IT systems to prepare for adoption of LEIs in payment messages
ISO	Continue work on how best to incorporate the LEI into the new payment messaging format

Adapted from Woodsome and Ramachandran, 68.

6 BEYOND THE CGD RECOMMENDATIONS

Introduction

International and advanced-economy policymakers have also pursued other initiatives, in addition to those recommended by the CGD Working Group. These include, most prominently, capacity building and technical assistance (TA), information sharing, and the development of new compliance technologies.

Capacity Building and Technical Assistance

G7 countries and international institutions have both emphasized capacity building and TA as an effective way to mitigate de-risking of international correspondent banking relationships. The Financial Stability Board (FSB) counts TA as the third priority in its four-point plan.[190] Likewise, the International Monetary Fund (IMF) includes TA among the measures it believes can have a significant impact on the decline in correspondent banking relationships.[191] In 2016, the leaders of the G20 called on member countries, the IMF, and the World Bank to "intensify their support for domestic capacity building to help countries improve their compliance with global [anti–money laundering and countering the financing of terrorism] … standards."[192]

Stakeholders believe that TA can address correspondent banks' concerns about inadequate risk controls and regulations in certain jurisdictions. In some cases, de-risking is driven by correspondent banks' lack of confidence in their respondent banks' risk controls or their supervision by local authorities. The IMF has argued that "boosting [correspondent banks'] confidence in respondent bank's risk management capacity and the regulatory environment [is] paramount." Improving the regulatory environment is especially important, the IMF continued, because correspondent banks treat it as "a proxy for respondent banks' risk management programs."[193]

TA is typically directed toward helping governments improve their anti–money laundering and countering the financing of terrorism (AML/CFT) legal and regulatory frameworks and related supervisory practices. Governments may seek TA to help them in a variety of tasks:

- Drafting new AML/CFT laws or regulations, or revising existing ones, to better align with international standards
- Improving the effectiveness of their supervision, through training and the development or revision of supervisory manuals
- Improving the effectiveness of their law enforcement and intelligence operations, in areas including money laundering investigations, case development, and prosecutions

190. FSB 2015, 2.

191. IMF 2017, 30.

192. G20 2016.

193. IMF 2017, 30.

In some cases, TA may be provided to help governments complete a discrete but complex task. For example, a government may seek help in conducting a national risk assessment or setting up a national financial intelligence unit.

TA may also be delivered directly to private-sector entities. For example, correspondent banks may work with their respondent banks to help them improve their risk management and compliance capabilities.[194] In addition, the Wolfsberg Group is conducting outreach related to its new correspondent banking questionnaire.

The IMF and the World Bank are major providers of TA for AML/CFT, due to their expertise, political neutrality, and global memberships. The IMF relies on a multi-donor-supported topical trust fund[195] and has reported running just under 700 AML/CFT-related technical assistance missions worldwide between 2012 and 2016.[196] In 2016, the IMF reported that it has provided TA for AML/CFT to 118 countries over the past decade, and that at the time it was assisting 29 countries.[197] The World Bank offers countries support in conducting their national risk assessments and in developing national ID systems.[198] The World Bank's Financial Integrity division reports that it has conducted over 400 TA activities for AML/CFT since 2000, with more than half of them targeted at low-income and lower-middle-income countries and with increasing emphasis on providing TA to fragile and conflict-affected countries. This work has contributed to the adoption of legislative or regulatory reforms in 65 countries and the establishment of financial intelligence units in 24 countries. In addition, the World Bank has helped more than 70 countries conduct national risk assessments, more than 40 having been completed.[199]

A number of other international organizations and national government agencies provide TA for AML/CFT. These include the regional development banks, such as the Inter-American Development Bank; FATF, which established a Training and Research Institute in 2016; the nine FATF-Style Regional Bodies; the Egmont Group of Financial Intelligence Units; and national government agencies, such as Australia's AUSTRAC (Australian Transaction Reports and Analysis Centre), and the US Treasury's Office of Technical Assistance (OTA). The OTA has engaged in a number of projects to improve the AML/CFT regimes in developing countries and to ensure the safe and transparent flow of legitimate financial transactions, including remittances. The OTA has worked with Somalia's central bank, among others.

The FSB has assumed a role in monitoring and coordinating TA for AML/CFT to address de-risking in correspondent banking. In an effort to identify TA coverage overlaps and gaps, the FSB now maintains an inventory that tracks more than 300 TA projects in 140 countries.[200]

---

194. IMF 2017, 30.

195. IMF 2009.

196. IMF 2017, 40.

197. Lagarde 2016

198. World Bank 2018b.

199. World Bank 2018b.

200. FSB 2017a, 13–14.

However, consolidated international data on the provision of TA for AML/CFT are not publicly available. The lack of consolidated international data makes it impossible to determine whether developing countries' TA needs are being met. It is also unclear whether the TA being provided is of consistently high quality (particularly where TA is outsourced to external consultants) and whether it is being appropriately tailored to individual country circumstances in all cases.

Less work has been done on TA directed toward other sectors affected by de-risking. In its report on remittance service providers, the FSB recommended that more TA be devoted toward helping national governments to improve their regulation and supervision of the MTO sector. The FSB also suggested that "TA could assist [remittance service providers] in the strengthening of their implementation of best practices and international standards."[201] Similarly, the World Bank has also stated that "focused training, in particular, for smaller MTOs could assist in improving their capacity to implement guidance."[202]

Data and Information Sharing

Improving information sharing has been another major focus in the response to de-risking. One problem identified by the Committee on Payments and Market Infrastructures (CPMI), among others, is that national privacy laws sometimes prevent respondent banks from fully cooperating with their correspondents' requests for information regarding suspicious or unusual transactions.[203] In the absence of clarifying information, correspondent banks may block transactions, place restrictions on accounts, or withdraw from relationships entirely. A second, related problem is that international banks are sometimes prevented from sharing information across the institution. A third problem is the lack of a systemwide view. Correspondent banks see only the transactions that they facilitate, meaning that each bank has only a partial view of payments activity.

Regulations may impede data sharing.[204] Multinational financial institutions may not be able to aggregate data across all of the jurisdictions they operate in.[205] Impediments to data sharing include bank secrecy laws, privacy and confidentiality laws, and data localization laws. The Institute of International Finance (IIF) has argued that such laws make it "complex, if not impossible, for [financial institutions] to obtain a group-wide view of illegal financial activities."[206] In a recent survey of 28 global financial institutions, the IIF reported that three-quarters of respondents felt they were able to share customer due diligence information across their organizations. However, respondents "were fairly evenly split" on whether they

201. FSB 2018c, 36–37

202. World Bank 2018a, p. 20.

203. CPMI 2016, 28.

204. IIF 2017a, 17.

205. IIF 2017a, 12.

206. IIF 2017a, 12.

could share suspicious activity information—and a majority of those who said they could still said they faced limitations on the types of information they could share.[207]

The CPMI has made several recommendations. Among these, it recommended that respondent banks include provisions in their contracts with clients for cross-border payments services the right to share certain types of information with their correspondent banks.[208] It also encouraged further exploration of centralized databases that aggregate both customer due diligence information and transactions information. One such database is already being developed in Mexico with the support of government authorities; banks will be required to report all international transactions to this database.[209]

In November 2017, FATF issued new guidelines on private-sector information sharing.[210] These guidelines cover relevant legal and operational issues for both intra- and interbank information sharing, as well as advice for supervisors. FATF also updated its consolidated standards on information sharing, which include all recommendations and interpretive notes related to information sharing in one document for ease of reference.[211]

In December 2017, the US Treasury's Financial Crimes Enforcement Network (FinCEN) rolled out the FinCEN Exchange, a public-private information-sharing partnership. The program will provide an opportunity for intelligence and national security to brief financial institutions on their AML/CFT priorities.

New Regulatory Compliance Technologies: Big Data Systems and Machine Learning[212]

In addition to the technical solutions described in Chapter 5, other forms of regulatory compliance technology (sometimes called "regtech") may help alleviate de-risking by lowering banks' compliance costs and improving their risk management capabilities. Among the most promising technologies are big data systems and machine learning algorithms. When applied to AML/CFT compliance, these innovations may improve banks' ability to conduct due diligence on their direct customers and to monitor transactions more effectively. Such innovations could enable banks to more confidently service higher-risk or lower-revenue customers, while at the same time improving their ability to detect illicit finance—this, in turn, could reduce banks' incentive to de-risk.[213]

Legacy transaction monitoring systems are inefficient. Banks spend billions of dollars every year on AML/CFT compliance, but the amount of illicit money that has been interdicted is small relative to the total estimated volume of illicit transactions.

207. IIF 2017b, 8.

208. CPMI 2016, 29.

209. CPMI 2016, 29–30.

210. FATF 2017c.

211. FATF 2017a.

212. Adapted in part from Woodsome and Ramachandran 2018, 24–44

213. IIF 2017a, 2.

At the same time, a high proportion of the alerts these systems generate turn out to be false positives.

These problems stem, to a large degree, from siloed systems, coarse customer segmentation, and hand-coded scenarios for identifying suspicious transactions. These rules are too broad and therefore capture too many legitimate transactions, resulting in too many false positives. At the same time, they may be too simple to capture more sophisticated or quickly evolving money laundering schemes. These legacy systems focus on specific entities or transactions, which means they may miss broader connections or patterns of activity.[214]

Big data and machine learning may help banks address these issues. These are information technologies for managing and analyzing large data sets.

Big data systems take in, organize, and store large, complex data sets. Compared with relational databases, big data applications offer more scalable storage capacity and processing. They also allow many different types of data to be stored in one place, so compliance staff spend less time gathering information from disparate sources.

Most important, big data can greatly expand the range and scope of information available for know-your-customer and suspicious transaction investigations. Big data applications are typically paired with advanced analytics engines—including machine learning programs—that can help identify complex patterns and relationships in the data that might otherwise go undetected.

Machine learning is a type of artificial intelligence—itself a branch of computer science—that allows computers to improve their performance at a task through repeated iterations. There are three broad types of machine learning: supervised, unsupervised, and reinforcement learning. With supervised learning, the machine learning program analyzes a data set to build a model that best predicts a predefined output. In contrast, with unsupervised learning, the machine learning program is not given a predefined output; rather, it explores the data on its own, looking for patterns and relationships in the data set. Reinforcement learning falls between the other two, with the algorithm receiving general feedback on its performance but without a specific, predefined output to aim for.

Machine learning may be used to augment or transform a number of compliance functions, including those for developing more sophisticated customer typologies and for more accurately monitoring transactions. These uses could simultaneously cut down on false alerts and identify new or hitherto undetected illicit finance techniques. Banks may benefit from more leeway to explore these new technologies. Banks would also benefit from more government feedback on the suspicious activity reports (SARs) they file, which would help them further hone their detection capabilities.

214. Ray 2018, 6.

US Legislative Reform Efforts

In the United States, there is an emerging consensus that America's AML/CFT regime needs to be modernized. This is reflected in increased congressional attention to the issue, as the US Congress holds hearings and considers draft legislation to reform the Bank Secrecy Act, the legislative cornerstone of America's AML/CFT regime. Several influential industry groups have also called for a major overhaul, including The Clearing House and the American Bankers Association.

In 2016, the 114th Congress held multiple hearings and introduced several AML/CFT reform bills, though none passed.[215] In late 2016, the House Financial Services Committee's bipartisan Task Force to Investigate Terrorism Financing concluded a two-year investigation with the release of its report, *Stopping Terror Finance: Securing the US Financial Sector*. Among its "longer-term" recommendations, the task force called for enhanced information sharing between the government and financial institutions (possibly through the use of a utility), better interagency and international coordination of TA provision, and harmonization of AML/CFT regulations and examination procedures for MTOs.[216]

In early 2017, The Clearing House, a trade association for the financial services industry, released the report *A New Paradigm: Redesigning the US AML/CFT Framework to Protect National Security and Aid Law Enforcement*. The product of a working group comprising 60 experts from law enforcement, national security, and financial-sector regulation, as well as lawyers, consultants, and the heads of AML/CFT compliance at several major banks, the report was unsparing in its assessment of the country's AML/CFT regime. Despite the billions spent every year, the report concluded, "many if not most of the resources devoted to AML/CFT by the financial sector have limited law enforcement or national security benefit, and in some cases cause collateral damage to other vital US interests—everything from US strategic influence in developing markets to financial inclusion."[217] The report identified several fundamental problems with the regime, including a lack of resource prioritization, unclear or conflicting policy objectives, widespread duplication of effort, impediments to information sharing, and "counterproductive examination standards and processes" that prioritize technical compliance over the production of valuable information for law enforcement and intelligence.[218] The Clearing House called for a number of major reforms, including giving FinCEN more direct supervisory authority over the AML/CFT compliance programs of large financial institutions—a move it argued would better align supervisory practices with the needs of law enforcement, intelligence, and other end users.[219]

The 115th Congress has continued to hold hearings and deliberate over the possible contours of AML/CFT reform, though no legislation has yet passed. Proposed reforms have included a government-managed repository of beneficial ownership information, to make it easier for banks to comply with a 2016 FinCEN rule that

215. Boehning et al. 2018, 26.

216. US House Financial Services Committee Task Force to Investigate Terrorism Financing 2016, 43–46.

217. The Clearing House 2017, 3.

218. The Clearing House 2017, 4–5.

219. The Clearing House 2017, 10–12.

requires financial institutions to collect this information on their legal entity customers; raising the monetary thresholds for banks submitting currency transaction reports and SARs; and making it easier for banks to share information. Other proposals deal with impact assessments to quantify the industrywide cost of AML/CFT compliance, reviewing whether FinCEN should take on a more direct supervisory role, and a safe harbor provision to incentivize technological innovation.[220] It is unclear, however, whether legislation will be passed prior to 2018 midterm elections.

New Recommendations

Table 18. New Recommendations for Capacity Building and Technical Assistance

Organization	Recommendation
Affected developing countries	Continue to enhance their own AML/CFT regulatory regimes and supervisory practices
IMF, World Bank, and other TA providers	Conduct efficacy studies of their TA provision and calibrate the delivery of TA based on the studies' findings
FSB	Play a greater role in coordinating TA among the major providers, in order to ensure that TA resources are being allocated efficiently and, to the extent possible, according to the expertise of the provider

Table 19. New Recommendations for Big Data Systems and Machine Learning

Organization	Recommendation
National regulators and international organizations	Determine whether local privacy and data sharing laws pose a challenge to the integration of these data sets and whether these laws can or should be amended without compromising privacy
National regulators	Share feedback on SAR submissions
National regulators	Allow financial institutions to share data so as to expand the pool that machine learning programs can learn from
National regulators	Consider a regulatory sandbox to allow financial institutions to experiment with machine learning solutions

220. Hardy and D'Aversa 2018a, 2018b.

7 CONCLUSION

The policy response to de-risking, especially at the international level, has been commendable. International institutions—including the G20, the Financial Stability Board, the Bank for International Settlements and its standing committees, the International Monetary Fund, and the World Bank—have all devoted significant effort to studying the problem, clarifying regulatory guidelines, supporting technological solutions, and offering technical assistance to country authorities still improving their supervisory practices. The G7 ministries of finance, often working behind the scenes, have also been integral to this effort.

Stakeholders should continue to work together to mitigate de-risking and its root causes. While progress has been made, the problem has not yet abated. The most recent data available, from mid-2017, indicate that the number of international correspondent banking relationships continues to decline.[221] Similarly, recent reports indicate that many money transfer operators and nonprofit organizations continue to encounter financial access problems, as well. In addition to the recording actions that are already underway, each chapter of this report suggests additional measures that could augment the policy response.

De-risking has exposed certain flaws in our approach to anti–money laundering and countering the financing of terrorism, but it also presents a valuable opportunity to address those shortcomings and, in doing so, to move toward a better system—one that does more both to ensure the integrity and inclusiveness of the global financial system, and to better serve economic development and poverty reduction.

221. FSB 2018b, 1.

REFERENCES

ABA (American Bankers Association). 2015. Letter to the Committee on Payments and Market Infrastructures, re CPMI Consultative Report on Correspondent Banking. December 7. Washington, DC.

———. 2017. Letter to the Honorable Steven T. Mnuchin, re request for information on Department of the Treasury regulations that can be eliminated, modified, or streamlined. July 31. Washington, DC.

Alleyne, Trevor, Jacques Bouhga-Hagbe, Thomas Dowling, Dmitriy Kovtun, Alla Myrvoda, Joel Chiedu Okwuokei, and Jarkko Turunen. 2017. "Loss of Correspondent Banking Relationships in the Caribbean: Trends, Impact, and Policy Options." Working Paper 17/209. Washington, DC: International Monetary Fund.

Alwazir, Jihad, Fazurin Jamaludin, Dongyeol Lee, Niamh Sheridan, and Patrizia Tumbarello. 2017. "Challenges in Correspondent Banking in the Small States of the Pacific." Working Paper 17/90. Washington, DC: International Monetary Fund.

Arab Monetary Fund, IMF (International Monetary Fund), and World Bank. 2016. *Withdrawal of Correspondent Banking Relationships (CBRs) in the Arab Region: Recent Trends and Thoughts for Policy Debate*. Abu Dhabi: Arab Monetary Fund.

Artingstall, David, Nick Dove, John Howell, and Michael Levi. 2016. *Drivers and Impacts of Derisking: A Study of Representative Views and Data in the UK*. London: Financial Conduct Authority.

ASBA (Association of Supervisors of Banks of the Americas). 2016. "Impact of Compliance/Regulatory Risk in Financial Activity ('De-risking') in the Americas." Mexico City: ASBA.

AUSTRAC (Australian Transaction Reports and Analysis Centre). 2015. "Bank De-risking of Remittances Businesses." Strategic Analysis Brief. West Chatswood, Australia: AUSTRAC.

BAFT (Bankers Association for Finance and Trade), Basel Institute on Governance, BBA (British Bankers' Association), International Chamber of Commerce, Institute of International Finance, and Wolfsberg Group. 2014. "De-risking: Global Impact and Unintended Consequences for Exclusion and Stability." Discussion Paper 1. London: BBA.

BCBS (Basel Committee on Banking Supervision). 2017. *Guidelines: Sound Management of Risks Related to Money Laundering and Financing of Terrorism*. Basel, Switzerland: Bank for International Settlements.

BIS (Bank for International Settlements) and World Bank. 2015. *Consultative Report: Payment Aspects of Financial Inclusion*. Basel, Switzerland: BIS; Washington, DC: World Bank.

Boehning, H. Christopher, Jessica Carey, Michael Gertzman, Roberto Gonzalez, Brad Karp, Richard Elliot, Rachel Fiorill, and Karen King. 2018. "Economic Sanctions and Anti-Money Laundering Developments: 2017 Year in Review." Client Memorandum. Paul, Weiss, Rifkind, Wharton & Garrison LLP.

Boyce, Toussant. 2016. "Strategic Solutions to 'De-risking' and the Decline of Correspondent Banking Relationships." Staff Discussion Paper. St. Michael, Barbados: Caribbean Development Bank.

Boyce, Toussant, and Patrick Kendall. 2016. "Decline in Correspondent Banking Relationships: Economic and Social Impact on the Caribbean and Possible Solutions." Policy Brief. St. Michael, Barbados: Caribbean Development Bank.

CFG (Charity Finance Group). 2015. *Briefing: Impact of Banks' De-risking on Not-for-Profit Organizations*. London: CFG.

———. 2018. *Impact of Money Laundering and Counter Terrorism Regulations on Charities*. London: CFG.

CGD (Center for Global Development) Working Group. 2015. *Unintended Consequences of Anti–Money Laundering Policies for Poor Countries*. Washington, DC: CGD.

The Clearing House. 2016. *Guiding Principles for Anti–Money Laundering Policies and Procedures in Correspondent Banking*. Washington, DC: The Clearing House.

——. 2017. *A New Paradigm: Redesigning the US AML/CFT Framework to Protect National Security and Aid Law Enforcement*. Washington, DC: The Clearing House.

Collin, Matthew, Samantha Cook, and Kimmo Soramäki. 2016. "The Impact of Anti–Money Laundering Regulation on Payment Flows: Evidence from SWIFT Data." Working Paper 445. Washington, DC: Center for Global Development.

CPMI (Committee on Payments and Market Infrastructures). 2016. *Correspondent Banking*. Basel, Switzerland: Bank for International Settlements.

CSBS (Conference of State Bank Supervisors) and MTRA (Money Transmitter Regulators Association). 2016. *The State of State Money Service Business Regulation and Supervision*. Washington, DC: CSBS.

De Koker, Louis, and John Symington. 2014. "Conservative Corporate Compliance: Reflections on a Study of Compliance Responses by South African Banks." *Law in Context* 30.

De Koker, Louis, Supriya Singh, and Jonathan Capal. 2017. "Closure of Bank Accounts of Remittance Service Providers—Global Challenges and Community Perspectives in Australia." *University of Queensland Law Journal* 36, no. 1 (2017): 119–154.

Desai, Vyjayanti T., Diofasi, Anna, and Lu, Jing. 2018. "The Global Identification Challenge: Who Are the 1 Billion People without Proof of Identity?" *Voices* (blog), World Bank, April 25.

Duke Law International Human Rights Clinic and Women Peacemakers Program. 2017. *Tightening the Purse Strings: What Countering Terrorism Financing Costs Gender Equality and Security*. Durham, NC: Duke University School of Law.

Durner, Tracey, and Liat Shetret. 2015. *Understanding Bank De-risking and Its Effects on Financial Inclusion*. London: Global Center on Cooperative Security; Oxford, UK: Oxfam.

Dutch Ministry of Finance, World Bank, and Human Security Collective. 2018. "International Stakeholder Dialogue: Ensuring Financial Services for Non-Profit Organizations." Background paper for International Stakeholder Dialogue, The Hague, February 15.

Eckert, Sue E., Kay Guinane, and Andrea Hall. 2017. *Financial Access for US Nonprofits*. Washington, DC: Charity and Security Network.

The Economist. 2018. "A Watertight Store of Indians' Personal Data Proves Leaky." January 11.

El-Hindi, Jamal. 2016. "Remarks to the CSBS State Federal Supervisory Forum." Financial Crimes Enforcement Network, May 26.

El Taraboulsi-McCarthy, Sherine, and Camilla Cimatti. 2018. "Counter-terrorism, De-risking, and the Humanitarian Response in Yemen: A Call for Action." Working paper. London: Humanitarian Policy Group, Overseas Development Institute.

Erbenová, Michael, Yan Liu, Nadim Kyriakos-Saad, Alejandro López-Mejía, Giancarlo Gasha, Emmanuel Mathias, Mohamed Norat, Francisca Fernando, and Yasmin Almeida. 2016. "The Withdrawal of Correspondent Banking Relationships: A Case for Policy Action." Staff Discussion Note SDN/16/06. Washington, DC: International Monetary Fund.

ESAAMLG (Eastern and Southern Africa Anti–Money Laundering Group). 2017. Survey Report on De-risking in the ESAAMLG Region. Dar es Salaam, Tanzania: ESAAMLG.

FATF (Financial Action Task Force). 2012. "Declaration of the Ministers and Representatives of the Financial Action Task Force." April 20.

——. 2013. "FATF Issues New Mechanism to Strengthen Money Laundering and Terrorist Finance Compliance." February 22.

——. 2015a. *Best Practices: Combating the Abuse of Non-profit Organisations (Recommendation 8)*. Paris: FATF.

——. 2016a. *FATF Guidance: Correspondent Banking Services*. Paris: FATF.

——. 2016b. *Guidance for a Risk-Based Approach: Money or Value Transfer Services.* Paris: FATF.

——. 2016c. *International Standards on Combating Money Laundering and the Financing of Terrorism & Proliferation: The FATF Recommendations*. Paris: FATF.

——. 2016d. "Outcomes of the Plenary Meeting of the FATF, Busan Korea, 22–24 June 2016." June 24.

——. 2017a. *Consolidated FATF Standards on Information Sharing: Relevant Excerpts from the FATF Recommendations and Interpretive Notes*. Paris: FATF.

——. 2017b. *FATF Guidance: Anti–Money Laundering and Terrorist Financing Measures and Financial Inclusion—with a Supplement on Customer Due Diligence*. Paris: FATF.

——. 2017c. *FATF Guidance: Private Sector Information Sharing*. Paris: FATF.

——. 2017d. *Methodology for Assessing Technical Compliance with the FATF Recommendations and the Effectiveness of AML/CFT Systems*. Paris: FATF.

FCA (UK Financial Conduct Authority). 2016. "De-risking: Managing Money-Laundering Risks." Last updated May 20.

FDIC (US Federal Deposit Insurance Corporation). 2015. "Statement on Providing Banking Services." Financial Institution Letter FIL-5-2015. Washington, DC: FDIC.

FFIEC (Federal Financial Institutions Examination Council). 2018. *Bank Secrecy Act Anti–Money Laundering Examination Manual*. Washington, DC: FFIEC. Accessed April 2018.

FinCEN (Financial Crimes Enforcement Network). 2011. "Questions & Answers: The New MSB Registrant Search Web Page."

——. 2014. "FinCEN Statement on Providing Banking Services to Money Services Businesses." Washington, DC: FinCEN.

Focus Group on Digital Financial Services. 2016. *Review of National Identity Programs*. New York: United Nations International Telecommunications Union.

Fowler, Jennifer. 2016. "Treasury Efforts to Protect and Support the Charitable Sector." *Treasury Notes* (blog), US Department of the Treasury, April 28.

FSB (Financial Stability Board). 2015. *Report to the G20 on Actions Taken to Assess and Address the Decline in Correspondent Banking*. Basel, Switzerland: FSB.

——. 2016a. *FSB Action Plan to Assess and Address the Decline in Correspondent Banking: End-2016 Progress Report and Next Steps*. Basel, Switzerland: FSB.

——. 2016b. *Progress Report to G20 on the FSB Action Plan to Assess and Address the Decline in Correspondent Banking*. Basel, Switzerland: FSB.

——. 2017a. *FSB Action Plan to Assess and Address the Decline in Correspondent Banking: Progress Report to G20 Summit of July 2017*. Basel, Switzerland: FSB.

——. 2017b. *FSB Correspondent Banking Data Report*. Basel, Switzerland: FSB.

——. 2018a. *FSB Action Plan to Assess and Address the Decline in Correspondent Banking: Progress Report to G20 Finance Ministers and Central Bank Governors Meeting of March 2018*. Basel, Switzerland: FSB.

——. 2018b. *FSB Correspondent Banking Data Report—Update. Basel, Switzerland: FSB*.

——. 2018c. *Stocktake of Remittance Service Providers' Access to Banking Services*. Basel, Switzerland: FSB.

G20 Finance Ministers and Central Bank Governors. 2015. *Communiqué: G20 Finance Ministers and Central Bank Governors Meeting, Istanbul*. Istanbul: G20.

GAO (US Government Accountability Office). 2018a. "Bank Secrecy Act: De-risking along the Southwest Border Highlights Need for Regulators to Enhance Retrospective Reviews." Report to Congressional Requestors GAO-18-263. Washington, DC: GAO.

——. 2018b. "Remittances to Fragile Countries: Treasury Should Assess Risks from Shifts to Nonbanking Channels." Report to Congressional Requestors GAO-18-313. Washington, DC: GAO.

Gardineer, Grovetta. 2014. “Statement on the Risk Management Associated with Money Services Businesses.” OCC Bulletin 2014-58. Washington, DC: Office of the Comptroller of the Currency.

——. 2016. “Risk Management Guidance on Periodic Risk Reevaluation of Foreign Correspondent Banking.” OCC Bulletin 2016-32. Washington, DC: Office of the Comptroller of the Currency.

G20. 2016. “G20 Leaders’ Communique: Hangzhou Summit.” Hangzhou: September 5.

Gelb, Alan, and Anna Diofasi Metz. 2018. *Identification Revolution: Can Digital ID be Harnessed for Development?* Washington, DC: Center for Global Development.

GLEIF (Global Legal Entity Identifier Foundation). 2018. Global LEI Index (database). Accessed July 2018.

GPFI (G20 Global Partnership for Financial Inclusion). 2017. *Digital Financial Inclusion: Emerging Policy Approaches*. Washington, DC: GPFI.

Haley, James. 2017. “De-risking: Effects, Drivers and Mitigation.” CIGI Papers No. 137. Waterloo, Ontario, Canada: Centre for International Governance Innovation.

——. 2018. *De-risking of Correspondent Banking Relationships: Threats, Challenges and Opportunities*. Washington, DC: Wilson Center Canada Institute.

Hardy, Peter, and Andrew D’Aversa. 2018a. “Congress Contemplates Broad AML/BSA Reform.” *Money Laundering Watch* (blog), Ballard Spahr LLP, January 24.

——. 2018b. “Congress Proposes National Directory of Beneficial Owners of Legal Entities.” *Money Laundering Watch* (blog), Ballard Spahr LLP, January 23.

Hartsink, Gerard. 2018. “The Use of the Legal Entity Identifier in Payment Systems.” *News & Media* (blog), Global Legal Entity Identifier Foundation, May 30.

HM (Her Majesty’s) Treasury, Home Office, Stephen Barclay, and Ben Wallace. 2017. *National Risk Assessment of Money Laundering and Terrorist Financing 2017*. London: HM Treasury and Home Office.

Hopper, Robert. 2016. *Disconnecting from Global Finance: The Impact of AML/CFT Regulations in Commonwealth Developing Countries*. London: Commonwealth Secretariat.

Human Security Collective and European Center for Not-for-Profit Law. 2018. *At the Intersection of Security and Regulation: Understanding the Drivers of “De-risking” and the Impact on Civil Society Organizations*. The Hague: Human Security Collective and European Center for Not-for-Profit Law.

IIF (Institute of International Finance). 2017a. “Deploying Regtech against Financial Crime.” Washington, DC.

——. 2017b. “Financial Crime Information Sharing Survey Report.” Washington, DC.

IMF (International Monetary Fund). 2017. “Recent Trends in Correspondent Banking Relationships—Further Considerations.” Policy Paper. Washington, DC: IMF.

——. 2009. “Press Release: IMF to Start Operations Under its First Topical Trust Fund Supporting Technical Assistance in Anti-Money Laundering and Combatting the Financing of Terrorism.” Press Release No. 09/108. Washington, DC: April 1.

IMF and Union of Arab Banks. 2015. “The Impact of De-Risking on MENA Banks.” Joint Survey. Washington, DC: IMF; Beirut: Union of Arab Banks.

Jan Grolleman, Dirk, and David Jutrsa. 2017. “Understanding Corresponding Banking Trends: A Monitoring Framework.” Working Paper No. 17/216. Washington, DC: International Monetary Fund.

Keatinge, Tom. 2014. *Uncharitable Behaviour.* London: Demos.

Keatinge, Tom, and Florence Keen. 2017. *Humanitarian Action and Non-state Armed Groups: The Impact of Banking Restrictions on UK NGOs*. London: Chatham House.

Lagarde, Christine. 2016. “Relations in Banking – Making it Work for Everyone.” Speech, Federal Reserve Bank of New York. July 18.

LEI ROC (Legal Entity Identifier Regulatory Oversight Committee). 2015. "Progress Report by the Legal Entity Identifier Regulatory Oversight Committee (LEI ROC): The Global LEI System and Regulatory Uses of the LEI." Basel, Switzerland.

Lewis, David. 2017. "US-MENA Private Sector Dialogue (PSD)." Speech to Financial Action Task Force (FATF), Washington, DC, October 16. FATF.

Lott, David. 2015. "Improving Customer Identification." Retail Payments Risk Forum working paper. Atlanta: Federal Reserve Bank of Atlanta.

Lovisotto, Giulio, Raghav Malik, Ivo Sluganovic, Marc Roeschlin, Paul Trueman, and Ivan Martinovic. 2017. "Mobile Biometrics in Financial Services: A Five Factor Framework." Oxford, UK: Department of Computer Science, University of Oxford.

OCC (Office of the Comptroller of the Currency). 2014. "Statement on Risk Management." OCC Bulletin 2014-58. Washington, DC: OCC.

Oliver Wyman and MicroSave. 2017. *Accelerating Financial Inclusion in South-East Asia with Digital Finance*. Manila: Asian Development Bank.

Otamendi, Santiago. 2017. "Speech at the GAFILAT [Financial Action Task Force of Latin America] Plenary." Financial Action Task Force.

PA Consulting Group. 2017. "New Technologies and Anti–Money Laundering Compliance." London: United Kingdom Financial Conduct Authority.

Paul, Scott, Anne-Marie Schryer-Roy, Ben Murphy, and Ed Pomfret. 2015. "Hanging by a Thread: The Ongoing Threat to Somalia's Remittance Lifeline." Joint Agency Briefing Note. Nairobi, Kenya: Adeso; London: Global Center on Cooperative Security; Oxford, UK: Oxfam.

PMPG (Payments Market Practice Group). 2017. "Market Practice Guidelines for use of the MT 202 COV." La Hulpe, Belgium: Society for Worldwide Interbank Financial Telecommunication (SWIFT).

Ray, Arin. 2018. *Dawn of a New Era in AML Technology*. New York: Celent.

Starnes, Susan, Michael Kurdyla, Arun Prakash, Ariane Volk, and Shengnan Wang. 2017. *De-risking and Other Challenges in the Emerging Market Financial Sector: Findings from the IFC's Survey on Correspondent Banking*. Washington, DC: International Finance Corporation.

Sullivan & Cromwell LLP. 2016. "S&C Memo: Joint Fact Sheet on Foreign Correspondent Banking Supervision and Enforcement." Washington, DC: Sullivan & Cromwell LLP.

SWIFT (Society for Worldwide Interbank Financial Telecommunication). 2015. "SWIFT Response to CPMI Consultative Report on Correspondent Banking." La Hulpe, Belgium.

———. 2017. "SWIFT Aligns KYC Registry with Updated Wolfsberg Due Diligence Questionnaire (DDQ) for Correspondent Banks." Press release, October 16. Toronto.

US Department of the Treasury. 2015. *National Terrorist Financing Risk Assessment*. Washington, DC: US Department of the Treasury.

US Department of the Treasury, Board of Governors of the Federal Reserve System, Federal Deposit Insurance Corporation, National Credit Union Administration, and Office of the Comptroller of the Currency. 2016. "US Department of the Treasury and Federal Banking Agencies Joint Fact Sheet on Foreign Correspondent Banking: Approach to BSA/AML and OFAC Sanctions Supervision and Enforcement." Washington, DC: US Department of the Treasury.

US House Financial Services Committee Task Force to Investigate Terrorism Financing. 2016. *Stopping Terror Finance: Securing the US Financial Sector*. Washington, DC: US House Financial Services Committee.

Warden, Staci. 2015. Framing the Issues: De-risking and Its Consequences for Global Commerce and the Financial System. Santa Monica, CA: Milken Institute.

Wolf, Stephan. 2017. “The True Nature of Identity in Business Applications: Working Paper for the ISO 17442 Review—Embedding the LEI within the Standards Landscape.” Basel, Switzerland: Global Legal Entity Identifier Foundation.

The Wolfsberg Group. 2017a. “CBDDQ Statement, Oct 2017.” Wolfsberg News (blog), October 15.

———. 2017b. “Wolfsberg CBDDQ.” Accessed in October.

———. 2017c. Wolfsberg Group Payment Transparency Standards. n.p.: The Wolfsberg Group.

———. 2018. “Wolfsberg Group Correspondent Banking Due Diligence Questionnaire.”

Woodsome, Jim, and Vijaya Ramachandran. 2018. Fixing AML: Can New Technology Help Address the De-risking Dilemma? Washington, DC: Center for Global Development.

World Bank. 2015a. “Fact Finding Summary from De-Risking Surveys.” Working paper 101097. Washington, DC: World Bank.

———. 2015b. “Report on the G20 Survey on De-Risking Activities in the Remittance Market.” Working paper 101071. Washington, DC: World Bank.

———. 2015c. “Withdrawal from Correspondent Banking: Where, Why, and What to Do About It.” Working paper 101098. Washington, DC: World Bank.

———. 2017a. *Global Financial Development Report 2017/2018: Bankers without Borders*. Washington, DC: World Bank.

———. 2017b. *Migration and Remittances: Recent Developments and Outlook*. Migration and Development Brief 28. Washington, DC: World Bank.

———. 2018a. *The Decline in Access to Correspondent Banking Services in Emerging Markets: Trends, Impacts, and Solutions—Lessons Learned from Eight Country Case Studies*. Washington, DC: World Bank.

———. 2018b. “Financial Integrity.”

———. 2018c. “Identification for Development (ID4D) Global Dataset.” Washington, DC: World Bank.

World Bank and ACAMS (Association of Certified Anti–Money Laundering Specialists). 2016. *Stakeholder Dialogue on De-risking: Findings and Recommendations*. Washington, DC: World Bank.

———. 2017. *Stakeholder Dialogue on De-risking: Supporting Financial Access for Humanitarian Organizations and Charities*. Washington, DC: World Bank.