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Expanding Global Liquidity Insurance: Myths and Realities of the IMF's Precautionary Credit Lines

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Myths and Realities of the IMF's Precautionary Credit Lines[1]

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Abstract.

Despite increasing volatility in the global economy, the uptake of the IMF's two precautionary credit lines, the Flexible Credit Line (FCL) and the Precautionary and Liquidity Line (PLL), has remained limited – currently to just four countries. The two new lending instruments were created in the wake of the global financial crisis of 2008 to enable IMF member states to respond quickly and effectively to temporary balance of payment needs resulting from external shocks. Both credit lines offer immediate access to considerable sums - over ten times a country's IMF quota in some cases -, with no (FCL) or very limited (PLL) conditionality. This paper addresses four misconceptions (or 'myths') that have likely played a role in the limited utilization of the two precautionary credit lines: 1) too stringent qualification criteria that limit country eligibility; 2) insufficient IMF resources; 3) high costs of precautionary borrowing; and 4) the economic stigma associated with IMF assistance. We show, in fact, that the pool of eligible member states is likely to be seven to eight times larger than the number of current users; that with the 2016 quota reform IMF resources are more than adequate to support a larger precautionary portfolio; that the two IMF credit lines are among the least costly and most advantageous instruments for liquidity support countries have; and that there is no evidence of negative market developments for countries now participating in the precautionary lines.

Keywords: IMF, precautionary finance, financial crisis management

JEL codes: F30, F33, E59

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I. Introduction

Uncertainty in the global economy is increasing: the IMF has revised down its expectations about global growth continuously during the last five years. Capital flows to emerging and developing economies have slowed down significantly over the past six years and international reserves in several countries are declining (IMF 2016). The growth in global trade has also been significantly smaller than expected in 2016, falling below the growth of GDP for the first time in fifteen years (WTO 2016). At the same time, the cost of borrowing for emerging countries rose sharply in early 2016, followed by a decline until September, and a reversal to rising cost by end-2016[2]. Growing geopolitical tensions and increasing friction in domestic politics are introducing additional risks. Many emerging economies could benefit from insurance against this backdrop of volatility.

The IMF has been a provider of a global public good – of global financial and economic stability – since its inception. In the wake of the global financial crisis it undertook a series of reforms to its lending facilities to strengthen its ability (and that of its member states) to manage volatility imposed from outside and to help prevent and lessen the magnitude of future crises. The reforms included the adoption of two new lending instruments: the Flexible Credit Line (FCL) – introduced in 2009 - and the Precautionary and Liquidity Line (PLL) –introduced in 2011[3]. They are meant to serve as precautionary measures[4] for member states with a proven track record of prudent economic and financial management, enabling a rapid response to temporary balance of payment needs created by regional or global shocks. Unlike conventional IMF instruments, the FCL involves no ex-post conditionality and PLL arrangements also imply only very limited post-approval requirements.

Despite the increased vulnerability of many emerging economies generated by a volatile external environment, precautionary instruments remain underutilized. To date only three countries – Colombia, Mexico, and Poland – have access to the IMF's FCL, and one country – Morocco – to the IMF's PLL. The slow uptake of these instruments is puzzling given countries' continued efforts to self-insure via reserve accumulation, the proliferation of regional pooling arrangements and swap lines, and the apparent satisfaction of the four current users as evidenced by continued renewals of the credit lines.

Why do countries sidestep the IMF's precautionary lending even when their demand for liquidity insurance appears to be high? In this paper we address four common myths associated with the

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[2] The EMBIG emerging countries bond index stripped spread increased from a yearly average of 330 basis points in 2014 to a yearly average of 415 basis points in 2015 and stood at an average of 442 for the first six months of 2016, peaking in February at 538. It declined to 348 by early September and was up to 407 by mid-November.
[3] Its predecessor, the Precautionary Credit Line (PCL) was introduced in August 2010
[4] Though qualifying member states can opt for immediate withdrawal of funds as soon as the FCL/PLL arrangement is concluded

two precautionary credit lines and provide data and analysis to demystify these perceptions. A summary of the myths and our findings supporting a different reality is as follows:

> **Myth 1: The qualification criteria set by the IMF – particularly for the FCL – is too stringent.** Countries may be put off from applying for the FCL (and the PLL) if they do not believe they would pass the IMF's demanding qualification criteria.
>
> **Reality:** Our analysis suggests that the pool of eligible member states for the FCL and the PLL is likely to be seven to eight times larger than the number of current users, with up to 18 additional FCL qualifiers and several other country candidates for the PLL.
>
> **Myth 2: IMF resources would not be sufficient to support an expanded precautionary lending portfolio if many countries applied for them.** Given the high level of access the FCL and the PLL provide compared to traditional IMF lending, the Fund's resources could be considered insufficient to support a larger number of precautionary credit lines.
>
> **Reality:** Resources are more than adequate to support a more widespread use of the precautionary instruments. With the IMF quota reform becoming effective in January 2016 and the subsequent increase of quota resources to $660 billion, the IMF could in principle accommodate a dozen or more FCL or PLL users.
>
> **Myth 3: The precautionary instruments are too expensive.** Commitment fees and other associated costs may be hard to justify for 'well-performing' countries with no immediate need for additional liquidity.
>
> **Reality:** Recent changes in the structure of the commitment fees following the quota reform have actually made the FCL and the PLL cheaper for most potential applicants. Moreover, the terms of complementary regional financial arrangements and other alternatives for precautionary support are similar or less advantageous than those associated with acquiring and maintaining the two IMF credit lines. Compared with the social cost associated with foreign reserve accumulation, the FCL and PLL represent a far less expensive substitute.
>
> **Myth 4: Any association with the IMF – even if it's only precautionary and without ex-post conditionality – carries some economic or political stigma for the country and its government.** Many countries view asking for IMF assistance in any form as an economic and political liability. The perception is that markets may react negatively since engagements with the IMF can be interpreted as a sign of economic problems. The electorate and policymakers may also question the need for any engagement with the

IMF for a well-performing economy, particularly if the country had previous, unfavorably viewed arrangements with the IMF.

Reality: The stigma associated with IMF assistance has proven hard to overcome, but the experience of Colombia, Mexico, and Poland with the FCL and the experience of Morocco with the PLL shows no negative market reaction. In some cases, a precautionary agreement has even been associated with positive market developments. The political impact of a precautionary arrangement is more difficult to quantify and we do not attempt to assess it in this paper. However, the repeated renewals by current users point to no lasting political repercussions.

The rest of this paper is organized as follows. Section II provides an overview of the basic characteristics (qualification criteria and pricing terms) of the FCL and the PLL as well as the current arrangements for the users of these credit lines. Sections III to VI tackle each of the four myths described above. Section III examines the role strict qualification criteria may play in the FCL's and PLL's limited uptake. To estimate the number of potential qualifiers, and thus the number of potential users, we create an index using qualification-related economic and institutional indicators. Section IV provides a brief overview of the IMF's resources and compares qualifiers' potential demand for credit lines with available IMF funds to show that current resources would allow for a significant expansion of precautionary lending. Section V contrasts the FCL and PLL with other insurance options member states may have access to, including regional financing arrangements, World Bank lending products, private precautionary lending, and self-insurance through reserve accumulation. Section VI tackles countries' concerns about the adverse economic repercussions associated with IMF programs (the *stigma* problem) by pointing to the lack of evidence for any lasting negative market response from access to the precautionary credit lines. Section VII explains why the recent trend of declining international reserves and changes in the IMF's commitment fee structure make the FCL and the PLL a particularly timely and beneficial crisis prevention tool for member states. Finally, we conclude by noting the possibility that the limited uptake up to now could be partly explained by the supply side, if either IMF staff or shareholders have more fundamental reservations about expanding access to these new instruments.

II. Background: A brief overview of FCL and PLL characteristics and their current usage

The appeal of the Flexible Credit Line and the Precautionary and Liquidity Line has been limited. Only three countries - Colombia, Mexico, and Poland - have used the FCL to date. While none of them have drawn on the credit line, all three have continually renewed their agreements with the IMF. The Former Yugoslav Republic of Macedonia and Morocco have been the only two countries with access to the PLL and its predecessor, the Precautionary Credit Line

(PCL). Morocco's PLL was renewed in 2014 and in 2016, for another two-year period. Macedonia did not ask for its PLL to be renewed upon its expiration in 2013. It is also the only country thus far that has drawn on its credit line, purchasing EUR 220 million in March 2011 (about 60% of the total available).

Of the currently active credit lines, Colombia's most recent FCL was approved for SDR 8.18 billion (500% of its quota[5]) in June 2016. Mexico's FCL was approved for SDR 62.39 billion (700% of its quota) in May 2016. Poland's FCL was approved for SDR 6.5 billion (156% of its quota) in January 2017. Morocco's PLL was approved for SDR 2.5 billion (280% of its quota) in July 2016. Table 1 shows a summary of relevant facts for the five countries that have had access since the instruments' inception.

Table 1. Characteristics of the five FCL and PLL agreements to date

Member state	Type	First approval	Most recent approval	Renewals	Term	Credit line (in USD)	Credit line (as % of quota)	Funds drawn?
Colombia	FCL	05/2009	06/2016	5[6]	2 yrs	$11.5 billion	400%	No
Mexico	FCL	04/2009	05/2016	5[7]	2 yrs	$88 billion	700%	No
Poland	FCL	05/2009	01/2017	5	2 yrs	$8.84 billion	159%	No
Morocco	PLL	08/2010	07/2016	3	2 yrs	$3.47 billion	280%	No
Macedonia	PLL	01/2011	01/2011	0	2 yrs	$0.48 billion	600% (pre)	Yes

In order to qualify for a Flexible Credit Line, countries need to have "very strong" economic fundamentals and institutional policy framework as well as a sustained track record and ongoing commitment to implementing "very strong" policies[8] (IMF 2015b). If a member state has fulfilled these criteria, it can gain access to the credit line and draw on it at any time during the

[5] All quota shares listed here reflect those at the time of the approval of their latest FCL or PLL agreements. For Macedonia, the quota shares thus reflect those before the implementation of the IMF's quota reform, which took place end-January 2016. For Colombia, Poland, Mexico and Morocco, the quota share is calculated based on their post-quota reform share as their agreements were approved following the implementation of the quota reform. Colombia's current SDR 8.18 billion access would equal to about 1,056% of its pre-reform quota; Mexico's current SDR 62.4 billion access would represent about 1,720% of its pre-reform quota; Poland's current SDR 6.5 billion access would represent about 385% of its pre-reform quota; and Morocco's current SDR 2.5 billion access would equal to about 424% of its pre-reform quota.
[6] Colombia's 4th FCL arrangement, approved in June 2015 was cancelled in June 2016 before the end of its two-year term and a new arrangement was requested and approved.
[7] Mexico's 4th FCL arrangement, approved in November 2014 was cancelled in May 2016 before the end of its two-year term and a new arrangement was requested and approved.
[8] The issue of what constitutes "very strong" economic policies and institutional framework will be discussed in section III.

agreement. Agreements have a maximum term of two years and can be renewed if the pre-qualification conditions continue to be met. There is no conditionality associated with the FCL and there is no official cap on the size of the credit line. The actual size of the credit line is determined in accordance with the "member's actual or potential need for Fund resources", based on an adverse scenario prepared by IMF staff (IMF 2015b).

The qualification criteria for the Precautionary and Liquidity Line are less stringent. It is limited to member states with "sound" economic fundamentals and institutional policy frameworks who have a track record of implementing "sound" policies and can be expected to do so in the future (IMF 2015c). The PLL is associated with some ex-post conditionality to address vulnerabilities, but the policy adjustments are expected to be less substantial than for a Stand-By Arrangement (SBA). Upon qualification a member state can access up to 250% of its quota in the first year of the agreement, with a cumulative cap of 500% over two years.

As with the FCL, once a country is pre-qualified for the PLL, it can draw on its credit line at any time throughout the duration of the arrangement (usually two years for both lines[9]). The pre-qualification conditions ensure that there is no need for a significant IMF intervention in countries' economic policies, as usually associated with other IMF instruments. Nevertheless, member states are required to complete annual reviews for the FCL and semi-annual reviews for the PLL, "to assess whether the country still meets the qualification criteria". If a review is not completed, access to the credit line is suspended. At the same time, the arrangement remains in place for its full term and can only be officially cancelled by the member state.

Countries that have been approved for an FCL or PLL need to pay commitment fees. The fees increase in 'brackets' with the size of the credit line, starting at 15 basis points (0.15%) for access up to 115% of the quota and rising to 60 basis points (0.6%) if access is above 575% of the quota[10]. They are refunded pro rata if a country decides to draw on the allocated funds.

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[9] The FCL was originally introduced with a possible length of the arrangement ranging from 6 months to 1 year. In August 2010, the IMF announced that it would double the duration of the credit line, to the current term of 1 year to 2 years. The same term applies for the PLL under its standard window. There is also a short-term liquidity window under the PLL, which provides six-month financing arrangements.

[10] Commitment fees were established in 1952 and were originally introduced to cover the IMF's costs associated with undrawn commitments (IMF 2015a). A new commitment fee schedule where fees rose with higher levels of access was adopted in 2009 with the introduction of the FCL and the PLL. Commitment fees were further adjusted following the implementation of the quota reform in January 2016. They are designed to discourage unnecessarily high precautionary access and to help offset the IMF's cost of setting aside a considerable share of its financial resources.

Box 1. FYR Macedonia: an outlier's case.
FYR Macedonia's experience with the PLL is an outlier in several respects: is the only country with access that has drawn on its credit line to date; it is also the only FCL or PLL user that did not complete all of its reviews; and that – consequently - did not renew its credit line agreement. Its unique experience can serve as a brief illustration for how some of the PLL processes work in practice. Macedonia's two-year PCL was approved in January 2011, with access to about EUR 386 million during its first year, with total access reaching EUR 463 million in the second year. It made a EUR 220 million drawing on March 30, 2011, as authorities claimed that the announcement of early elections has resulted in reduced market access and higher risks (IMF 2014a). Macedonia completed its first semi-annual review with some delay. It did not complete its second review, due in early 2012, as the IMF judged progress in the implementation of remedial measures to address domestic government arrears insufficient. As a result, it forfeited its access to further funds. Macedonian authorities did not cancel the agreement, but decided to let it expire after its initial two-year term in January 2013. They believed that "the continued potential availability of Fund resources could help to maintain confidence in a downside scenario" (IMF 2014a, p. 16).

Should a country draw on its credit line, it faces an interest rate equivalent to the IMF's basic rate of charge, which fluctuates based on market conditions. There is a 200 basis point surcharge for credit above 187.5% of the quota. As of September 2016, this translates into an effective interest rate of 1.05% up to 187.5% of the quota and 3.05% on credit outstanding above that limit. The interest rate rises with time –for countries with outstanding FCL or PLL borrowing, the interest rate on credit above 187.5% of the quota increases by an additional 100 basis points. There is also a service charge of 50 basis points on each amount drawn.

Overall, the FCL and the PLL offer quick access to large amounts of funds with no to limited conditions attached. Repeated renewals requested by current qualifiers suggest they are satisfied with the agreements. The two instruments have great potential to boost individual countries' and the global economy's resilience in the face of shocks, yet their use remains limited to 3 (FCL) + 1 (PLL) countries. In the next four sections we explore four common concerns that may explain the low number of current users and provide arguments for demystifying these concerns.

III. Are qualification criteria too stringent? An index of potential FCL and PLL qualifiers.

The FCL is considered to be a product for "very strong" performers, evaluated against several dozens of indicators across nine broadly defined policy areas (see Table 2). Countries with significant shortcomings in one or more of these areas would not be eligible. There is no official list of qualifying countries or minimum/maximum thresholds that would definitively include or exclude a country from eligibility for the FCL or the PLL. Requests for access and the IMF's preliminary assessment of qualification are treated as confidential to avoid a potential negative market reaction to a country's failure to qualify. Each case is assessed individually, upon request from the member state. As a result, many countries likely face considerable uncertainty over whether their application would be accepted, which could act as deterrent for policy makers to invest time, effort, and political capital in pursuing access to these credit lines. In fact, an IMF survey of 54 emerging and small advanced economies found that "greater predictability of the qualification assessment" was the most strongly endorsed reform by emerging economies to improve the effectiveness of the FCL and the PLL (IMF 2014a).

Qualification criteria for the FCL and the PLL. Table 2 (below) provides an overview of the key areas of qualification criteria for the two instruments. As mentioned earlier, FCL eligible member states must have strong performance in most of the nine areas outlined below, without significant underperformance in any area, in addition to very positive assessment in Article IV consultations and a track record of implementing very strong policies. PLL eligibility is determined based on qualification criteria in five policy areas, which are broadly aligned with that of the FCL (Table 2). Eligible states must have good performance in three out of the five qualification areas, with no significant shortcoming in any area.

Table 2. Main Areas of Qualification Criteria for the FCL and the PLL[11]

FCL Qualification Criterion	PLL Qualification Criterion
1. Sustainable external position 2. A capital account position dominated by private flows 3. A track record of steady sovereign access to international capital markets at favorable terms 4. A reserve position that is relatively comfortable when the arrangement is requested on a precautionary basis	I. External position and market access
5. Sound public finance, including a sustainable public debt position determined by a rigorous and systemic debt sustainability analysis	II. Fiscal policy
6. Low and stable inflation, in the context of sound monetary and exchange rate policy	III. Monetary policy
7. Absence of bank solvency problems that pose an immediate threat of a systemic banking crisis 8. Effective financial sector supervision	IV. Financial Sector Soundness and Supervision
9. Data transparency and integrity	V. Data Adequacy

[11] Source: p. 16, IMF (2014b).

Stated exclusions from qualification include: i) sustained inability to access international capital markets; ii) the need for large macroeconomic or structural policy adjustment (unless already credibly launched pre-approval); iii) a public debt position that, with high probability, is not sustainable in the medium term; and iv) widespread bank insolvencies. Should any of these four contingencies apply, a member state would not be eligible for the PLL or the FCL.

As early commentators, such as Dervis (2009) have also pointed out, the published qualification criteria leave much open to interpretation. The IMF proposes a wide range of indicators to assess a country's strength in each of the qualification areas[12], but doesn't provide any guidance on the weight assigned to any given area or measure in evaluating qualification. Adding to the uncertainty surrounding a country's eligibility is that qualifying member states must also demonstrate a "very strong or sound institutional policy framework". The IMF's 2014 review of the FCL and the PLL indicates that a track record of implementing countercyclical monetary and fiscal policies, keeping corruption at bay, and having 'effective governance' could all contribute to the fulfilment of the IMF's institutional criteria (IMF 2014c), but there is no itemized list of measures of institutional strength that would provide a solid foundation for (self-)assessment.

Early assessments by the private sector suggested that at least 11 countries would qualify for the FCL alone (Deutsche Bank 2008). This was likely an underestimate, given that it didn't feature Colombia, a now confirmed qualifier.

In light of these shortcomings and to shed some light on how limited the pool of likely successful applicants for the two credit lines actually is, we conduct a simple and preliminary exercise: we create a list of likely qualifying countries by constructing an index based on indicators of institutional strength and economic performance. These indicators are largely aligned with those suggested by the IMF (2015a). The exercise is presented in what follows.

An exercise to identify potential FCL and PLL qualifiers.

Preliminary steps: To create our list of potential qualifiers, we first eliminate those member states that were highly unlikely to qualify or apply based on the four exclusion criteria listed above. From the 188 sovereign member states of the IMF, we excluded from our list[13]:

- Member states that would qualify for concessional IMF lending under the Poverty Reduction and Growth Trust. This led to the exclusion of 73 member states.
- Member states that have active lending agreements with the IMF. This led to the exclusion of 14 additional member states, including Pakistan, Romania, and Ukraine.
- Member states involved in a high-intensity (internal) conflict (Libya and Syria).

[12] See IMF (2015a) p. 18, Table 1.
[13] Based on data from September 2015. For more details on why these categories of countries were excluded, see the Appendix.

- Member states with significant data shortcomings, including countries with delays in completion of Article IV consultations over 18 months or mandatory stability assessments over 18 months. This led to the exclusion of an additional 17 countries.

We have also excluded the two following categories of member states, where application and/or qualification for the two new lending instruments – while not impossible – were judged to be highly unlikely:

- Member states with outstanding credit obligations to the IMF.
- High-income member states with excellent capital market access – defined as a Standard & Poor's sovereign credit rating of AA or above - including economies issuing reserve currencies, who are unlikely to find access to precautionary lending appealing (for example: Germany, Sweden, Japan, USA).

Following these exclusions, we are left with a 'shortlist' of 47 potentially eligible countries.

Indicators. Our proposed index is based on variables reflecting the IMF's eligibility criteria. These criteria can be ordered into three broad categories: i) institutional strength; ii) robustness of the economy; and iii) data quality:

i) ***Institutional strength***. To evaluate the institutional strength of member states, we use three indicators of institutional quality:

- Government effectiveness
- Control of corruption; and
- Regulatory quality

All three come from the Kaufmann-Kraay-Mastruzzi Worldwide Governance Indicators. The first two are also identified as suggested institutional quality indicators by the IMF (2014c), while the regulatory quality indicator can serve as an imperfect, but good-enough measure of the financial sector supervision qualification area outlined in Table 2 (and as shown in Table A1). While this indicator encompasses the quality of regulation beyond the financial sector, it does offer a good approximation of the government's ability and willingness to formulate and implement effective policies with regards to private sector entities.

ii) ***Economic policy and performance indicators.*** We use eight indicators of economic policy and performance, which appear to be strongly correlated with an economy's long-term resilience (Rojas-Suarez 2015) and which are also listed as relevant by the IMF (2015a):

- External debt/GDP
- Short term external debt/ international reserves
- Standard and Poor's credit ratings (Moody's when no S&P rating available)

- Current account balance/GDP
- Gross government debt/GDP
- Fiscal balance/GDP
- Standard deviation of inflation over ten years
- Capital adequacy ratio

iii) ***Data quality.*** Given the IMF's vague definition of data adequacy, we do not undertake further exploration of this measure in our index. However, all member states considered potentially eligible based on their institutional quality and economic indicators subscribe to the Special Data Dissemination Standard (SDDS). Thus, our estimated number of eligible countries appears to be consistent with the requirement for data quality compliance.[14].

As noted above, the IMF offers no guidance on how these categories and sub-categories are weighted when assessing a member state's qualification for the FCL or the PLL. It suggests a number of relevant indicators[15] – over a dozen for each sub-category at times – but without specifying their relative importance. For our estimate of the number of potential qualifiers (below), in the construction of our index we weight each of the indicators equally, but vary the role and overall weight of economic- vs. institutions-related measures. In the exercise below, we present two alternative weighting systems which, in turn, produce two alternative lists of potential qualifiers (albeit with a substantial degree of overlap). For a full list of the indicators, sources, and data years used and how they compare to the FCL/PLL eligibility criteria outlined in IMF documents, see Annex Table A1.

The Index of Potential Eligibility at work. Our first index is constructed using two stages: in the first stage, we rank countries on the quality of their institutions and eliminate those with a score below the lowest-scored known FCL or PLL qualifier; in the second stage, we assign scores and rank the countries not eliminated during the first stage based on the eight equally-weighted economic indicators listed in the sub-section above.

For stage 1, for each of the 47 shortlisted countries, we take the average of the standardized scores of the three measures of institutional quality: WGI government effectiveness, WGI control of corruption, and WGI regulatory quality, using 2014 data. Each of the three standardized indicators is weighted equally (see Box 2). Given that Morocco is the only confirmed current qualifying country for the PLL - which has less stringent qualification requirements than the FCL -, we use Morocco as our cut-off line for potential PLL eligibility, thus creating a list of 'minimum' qualifiers. Countries further down the institutional quality

[14] All current and past FCL and PLL qualifying countries subscribe to the IMF's SDSS. However, the IMF states that the 'data transparency and integrity' criteria for FCL qualification can be met through "a subscription to the SDDS or a judgement that satisfactory progress is being made toward meeting its requirements", which leaves room for interpretation (IMF 2015b).

[15] IMF (2015a) p. 18, Table 1.

rankings could still possibly qualify for the PLL (or perhaps even the FCL), but we prefer this more conservative approach that helps us avoid making further subjective assessments.

Box 2. The two sub-indices of the eligibility index:

1. **Institutions sub-index (stage 1):**

First, standardize each of the three WGI indicators j for each country i: $WGI_{i,j} = \frac{x_{i,j} - \bar{x}_j}{\sigma_j}$,

where $\bar{x}$ stands for the mean and σ stands for the standard deviation.

Then we construct the institutional quality score for each country i: $I_i = \frac{\sum_{j=1}^{3} WGI_{i,j}}{3}$

2. **Economic indicators sub-index (stage 2):**

First, standardize each of the eight economic indicators k , for each country i: $ECON_{i,k} = \frac{x_{i,k} - \bar{x}_k}{\sigma_k}$

Then we construct the economic indicators-based score for each country: $E_i = \frac{\sum_{k=1}^{8} ECON_{i,k}}{8}$

Table 3. Institutional quality sub-index rankings

Rank	Country	Rank	Country	Rank	Country
1	Chile	21	South Africa	41	Guatemala
2	Estonia	22	Montenegro	42	Lebanon
3	Israel	23	Bulgaria	43	Belarus
4	Malta	24	Panama	44	Gabon
5	Korea	25	Thailand	45	Egypt
6	Lithuania	26	Colombia	46	Paraguay
7	Mauritius	27	El Salvador	47	Ecuador
8	Latvia	28	Mexico		
9	Poland	29	China		
10	Malaysia	30	Philippines		
11	Slovenia	31	Peru		
12	Czech Republic	**32**	**Morocco**		
13	Uruguay	33	Brazil		
14	Slovak Republic	34	Indonesia		
15	Botswana	35	Fiji		
16	Costa Rica	36	Kazakhstan		
17	Hungary	37	India		
18	Croatia	38	Russia		
19	FYR Macedonia	39	Belize		
20	Turkey	40	Azerbaijan		

Table 3 shows the 47 shortlisted countries ranked according to their score on the institutional quality sub-index. There are 32 countries (including Morocco, our cut-off point) that pass the first stage of this eligibility test.

For stage 2, for each of the remaining 32 countries, we take the average of the eight standardized economic indicators (with each indicator weighted equally) to generate a score and ranking for the country[16] (see Box 2). We again use Morocco as our threshold of eligibility. Table 4 shows that according to our institutional and economic criteria, a minimum of 27 countries could be eligible for the FCL or the PLL. If we take the lowest-ranked FCL-approved country, Colombia, as our minimum threshold for the FCL, there are 21 countries (or 20 excluding unlikely candidate China), which could potentially qualify for the credit line.

Any change in the weights assigned to the eight economic indicators is going to produce a different set of qualifying countries. For example, if we increase the weight of the fiscal balance indicator to, say, 0.25 and assign a weight of 0.107 to each of the other seven economic indicators, the number of potential FCL and PLL qualifiers would be reduced to 25 countries and the number of potential FCL qualifiers[17] to 18. If we gave external debt (as a share of GDP) greater weight in a similar manner, the list of potential qualifiers would be 26 countries.

Thus, while the set of qualifying countries can vary depending on specific assumptions, the main point of exercise has been to show that the likely *number* of potential qualifiers far exceeds the number now benefiting from the two precautionary credit lines.

Table 4. List of potential FCL and PLL eligible member states

Rank	Country	Rank	Country
1	Estonia	**20**	**Poland**
2	Philippines	**21**	**Colombia**
3	Korea	22	Mauritius[18]*
4	Thailand	23	Croatia
5	Czech Republic	24	South Africa
6	Lithuania	25	Uruguay
7	Israel	26	FYR Macedonia
8	China	**27**	**Morocco**
9	Slovak Republic	28	Panama*
10	Bulgaria	29	El Salvador
11	Peru	30	Costa Rica
12	Chile	31	Montenegro
13	Slovenia		
14	Botswana		
15	Turkey		

[16] The indicators of external debt/GDP, short term external debt/international reserves, gross government debt/GDP, fiscal balance, and standard deviation of inflation over ten years were multiplied by -1 before standardization to ensure that for all eight indicators in the economic indicators sub-index, larger values would represent stronger economic performance.
[17] As determined by the lowest-ranked current qualifier, in this case, Poland
[18] Countries marked with an * are listed among 'countries with offshore financial centers' by the IMF (See: https://www.imf.org/external/np/mae/oshore/2000/eng/back.htm). For these member states the external debt statistics – one of our eight economic indicators – tend to be inflated compared to the size of their economy. Thus, depending on the adjustments made to account for their unusually high private foreign liabilities, they could be ranked higher and/or also be ranked as 'eligible'.

16	Malaysia
17	**Mexico**
18	Hungary
19	Latvia

Alternative potential eligibility index. We also construct an alternative index, where, for each country, we average their two scores from the institutional sub-index (the average of the three standardized institutional quality indicators) and the economic sub-index (the average of the eight standardized economic indicators). This alternative ranking would raise the number of FCL or PLL eligible countries to 33 including Morocco. The ranked list of countries using this method is displayed in Annex Table AX. We find these results less plausible than the first approach shown above, as FYR Macedonia (a former PLL qualifier) ranks above Colombia and Mexico, for example. However, it still underscores the point that the number of eligible countries is several magnitudes larger than the current uptake.

Using our relatively conservative estimates, it appears that there are at least 27 IMF member states that would have a good chance of qualifying for the PLL or the FCL. Even if we restrict our search to those likely to be FCL-eligible –providing the most resources with no strings attached– we find about 21 countries who we can reasonably assume to be good candidates. Thus, the seemingly strict requirements for qualification do not appear to be a constraint for a significant number of countries and should not deter member states from applying to access the IMF's precautionary instruments. The risk of rejection for most countries scoring above the (Morocco) threshold on our index is likely to be very low. Based on the potential number of qualifiers alone, the FCL and PLL are utilized significantly below their limit and potential.

IV. Would current IMF resources be sufficient to finance an expanded FCL and PLL?

On the 'supply' side of its precautionary lending, the IMF may be reluctant to expand the use of this facility if it did not have sufficient resources to finance it. Board members' concerns about the adequacy of IMF funds could be a potential reason why the use of the FCL and the PLL has been limited. Even though the implementation of the quota reform in January 2016 close to doubled the size of quota resources, Managing Director Lagarde herself expressed some concern that IMF resources may not be sufficient to address vulnerabilities in emerging markets[19] (Talley 2016). It has also been mentioned as a risk by commentators advocating for a reform of the precautionary facilities (Panizza 2016). Currently the IMF treats funds committed on a precautionary basis under the FCL and the PLL as unusable for any other purpose. From a budgetary/liquidity point of view, they are treated the same as loans that had been transferred to member states. The combination of high levels of access provided by the FCL (and to a lesser extent the PLL) and the currently very low levels of IMF's outstanding regular loans (only US

[19] For example: "The IMF chief also said the IMF's war chest may not be sufficient to manage the growing turbulence in emerging markets." and "[…] mounting emerging-market vulnerabilities to erratic trillion-dollar capital flows justify a bigger pool of reserves emerging markets could tap into, Ms. Lagarde said."

$55 billion) means that the four current qualifiers' credit lines accounted for close to three-quarters of the IMF's committed resources as of July 2016 and were equivalent to close to 40% of the funds currently owed to the IMF by member states.

Members' currencies (also referred to as 'quota resources' or simply 'quotas') represent the IMF's core funds available for lending and to extend credit lines to its members. They can be deployed at any time without further action by member states (subject only to Board approval as required for all IMF commitments). Following the full implementation of the IMF's quota reform in January 2016, member's currencies have risen to SDR 474 billion, equivalent to about US $659 billion.

The New Arrangements to Borrow (NAB) are the IMF's primary supplemental source of financing. They allow the IMF to borrow from participating member states should it need additional funds to support its lending activities. The NAB was expanded from SDR 34 billion to SDR 370 billion (US $514 billion) in 2011 to increase IMF resources amidst the global financial crisis. With the quota reform becoming effective in 2016, it has now been scaled back to SDR 182 billion (about US $253 billion). Access to NAB funds is subject to activation every six months and needs the approval of participants representing 85% of total credit arrangements. The NAB was activated ten subsequent times between 2011 and 2016 and the most recent activation ended in February 2016, following the implementation of the quota reform. The repeated activation suggests that it is a relatively secure ('hard') source of funding when quota resources are perceived to be low. One potential vulnerability is that if participating states experience balance-of-payments problems, they may withdraw at short notice from the arrangement[20].

Bilateral borrowing agreements represent an additional reinforcement of the IMF's liquidity. In 2012, 35 lenders agreed to further bolster IMF resources by providing SDR 282 billion (US$ 392 billion) in available credit. The agreements had a two-year term, with the possibility of two one-year extensions to extend them to a maximum duration of four years. The second one-year extension of the arrangement was approved in October 2015, with SDR 271 billion available for the IMF to borrow. The IMF can draw on the bilateral agreements once its forward commitment capacity (resources readily available for lending) has dipped below SDR 100 billion (US$ 139 billion) (Brau and Stedman 2014). The IMF is currently in negotiations with creditors regarding a new round of bilateral borrowing agreements with a maximum term until end-2020. Creditors have committed SDR 243 billion (US$ 340 billion) as of early October 2016[21].

[20] A withdrawal from Brazil, India, or Russia, for example, would represent a $6.2 billion loss (each) in NAB funds. China's withdrawal would represent a $22 billion loss.
[21] For the most recent updated on the bilateral borrowing arrangements, see: http://www.imf.org/external/about/faq/bilatborrowing.htm

Table 5. Estimated IMF resource availability, in USD billions

Resource	As of May 2015, pre quota reform[22]	As of July 2016, post quota reform[23]	Available immediately?
Member's currencies (quota)	364.4	663.5	YES
New Arrangements to Borrow (NAB)	514.5 (of which 350.8 was under activation)	252.8	NO; subject to activation every 6 months, on approval by 85% of creditors
Usable bilateral agreements	381	340	NO; subject to low quota availability.
Total potential resources	**1,259.9**	**1,309.6**	
- (Used resources + reserves)	-295.2	-413.8	
Total credit capacity	**964.7**	**842.4**	

Table 5. shows the availability of IMF resources by type before and after the quota reform. Including bilateral agreements, and assuming a potential NAB activation, IMF potential credit capacity is close to US$ 850 billion (this is following deductions for current outstanding credit, reserves, and other non-usable resources). The US$ 300 billion increase in core, quota resources following the reforms has boosted the share of IMF resources that are available immediately and without any conditions significantly, and thus strengthened the IMF's lending position.

IMF resources compared to potential FCL and PLL qualifiers' access. Our 'minimum qualifiers index' suggests that 27 countries could be eligible for the FCL and the PLL. How do their potential credit lines under the two instruments compare to the IMF's credit capacity? We assume the average credit line to equal 1000% (so 10 times) of the country's pre-reform quota[24]. At this level, the total additional credit line demand combined for all 27 of our potential qualifiers would add up to US$ 383 billion (in addition to the funds already committed to Colombia, Mexico, Poland, and Morocco). If we exclude China – an unlikely applicant – the

[22] Source: https://www.imf.org/external/np/tre/liquid/2015/0515.htm
[23] Source: http://www.imf.org/External/Pubs/FT/quart/2017fy/073116.pdf
[24] The past and current FCL and PLL arrangements for Colombia, Poland, and Morocco have all been for amounts below or close to 1000%, with access equal to 1,056%, 918%, and 424% respectively of their pre-reform quotas. Mexico's current FCL arrangement provides a larger access to funds, at a level equivalent to 1,720% of its pre-reform quota (700% of the post-reform quota).

resources needed would be US$ 251 billion. This is a little more than a quarter of total current IMF credit capacity and could be covered in its entirety by post-reform quota resources.

Simultaneous applications and approvals of the 27 potentially eligible (or 23 if we exclude the current qualifiers) economies would of course be an extremely improbable scenario. The fact that the IMF would still have the resources to cover this demand shows that current credit capacity is more than adequate to satisfy any reasonable increase in the demand for the two instruments, while also enabling the IMF to meet members' additional financing needs.

In short, the IMF clearly has the capacity to increase the 'supply' of precautionary credit lines. However, to what extent the Fund bureaucracy or its shareholders represented in the Board have the willingness to do so and what share of its resources they are prepared to dedicate to the FCL and the PLL is less evident. On the one hand, the IMF's repeated efforts both before and after the global crisis to offer insurance-like instruments for crisis prevention suggests that the Fund is well aware of these instruments' potential contribution to global financial stability. It has also worked to make its precautionary facilities more attractive over the years, further indicating its commitment to their broader uptake. On the other hand, having no (FCL) or very limited (PLL) ex-post conditionality, the two contingent credit lines represent a considerable departure from the IMF's traditional lending practices. This might make a number of Board members wary of their expansion.

V. Are the FCL and the PLL too expensive? A comparison with similar 'crisis buffer' instruments.

The FCL and PLL are not the only instruments to offer a buffer during a (liquidity) crisis and, as mentioned earlier, access comes with a commitment fee. Countries may be reluctant to pay this 'insurance premium' if there are other tools available at their disposal that offer a similarly large and reliable cushion at better terms. If that were the case, the low uptake of the credit lines could simply be the result of their lack of competitiveness vis-à-vis similar tools. One could also argue that the mere existence of the FCL/PLL offers enough insurance, and formal approval for an IMF credit line provides only a minor additional boost to market confidence. Markets make their own assessment regarding countries' FCL (and PLL) eligibility and factor in the probability of qualification when evaluating a country's liquidity constraints. In this case, eligible member states would have fewer incentives to go through the application process.

Regional financial arrangements (RFAs) vs. IMF precautionary credit lines. While credit lines offered by RFAs and those offered by the IMF are best viewed as complements, particularly when it comes to addressing regional or systemic crises, they are another source of liquidity insurance and liquidity assistance that a number of countries can rely on. Some RFAs work in close collaboration with the IMF, relying on its policy guidance and surveillance, and even requiring its engagement for access to larger credit lines or loans (IMF 2013). Others seek to operate more independently.

In Asia, bilateral swap agreements between thirteen economies (the ASEAN + 3 countries) were expanded into the Chiang Mai Initiative Multilateralization (CMIM) in 2012, a US$240 billion multilateral swap arrangement. The CMIM also offers its own precautionary credit line, which provides additional liquidity ranging from (maximum) 800% of its IMF quota equivalent for the Philippines to 72% of the IMF quota equivalent for Brunei Darussalam.

The $100 billion BRICS contingent reserve arrangement (CRA) provides liquidity support to its five member economies. It also offers precautionary access, with available funds ranging from 236% of its quota equivalent for South Africa, to 48% of its quota equivalent for China.

In Latin America, the Fondo Latinoamericano de Reservas (FLAR) offers its eight Latin American members a no-conditionality contingency credit as well as four other types of loans to address external imbalances. However, with a total paid-in capital of US$ 3.9 billion, its capacity for liquidity assistance is limited.

The EU provides balance of payments assistance (EU BOP), including precautionary programs, to its nine non-Eurozone member states. The 19 Eurozone economies that form part of the European Stability Mechanism (ESM) can make use of precautionary financial assistance via two new instruments: the Precautionary Conditioned Credit Line (PCCL), intended for strong economic performers similarly to the FCL, and the Enhanced Conditions Credit Line (ECCL), which entails more conditionality and surveillance, similarly to the PLL. There is no set limit for the size of any given individual credit line, but the EU-financed share of Romania’s most recent precautionary balance-of-payments program at EUR 2 billion (slightly above its post-reform quota) may provide an indication of the likely level of support[25].

Both the CMIM and the BRICS CRA make access beyond 30% of their borrowing limit contingent on a concurrent IMF program. The two ESM instruments do not expressly require IMF engagement, but state that the European Commission should work together with the IMF “wherever possible” on requests for precautionary assistance. All five EU balance of payments assistance programs to date were provided in tandem with an IMF stand-by arrangement. Thus, when it comes to liquidity insurance, most RFAs on their own are no match for the IMF’s precautionary lines in terms of the size of the credit lines available or the continued reliability of resources. The FCL and the PLL offer access to a significantly larger amount of funds than any other RFA and for a longer, continued period of time. The three FCL recipient countries have had over seven years of continuous access (at varying levels, but generally above 500% of their pre-reform quota). The RFA-provided precautionary instruments offer a maximum of two years in total. The terms of borrowing and precautionary access tend to also be less favorable or almost

[25] The maximum lending capacity for the EU’s balance-of-payments assistance is EUR 50 billion. The ESM maximum lending capacity is EUR 700 billion, of which EUR 80 billion represent paid-in capital.

identical to the terms and conditions offered by the IMF. If the credit line is drawn, the maturity for the loan under the CMIM, FLAR, and the BRICS CRA is between 6 months and 1 year; the FCL and PLL have maturity between 1 and 2 years, with full repayment expected after 3.25 to 5 years. Interest rates – where published – are either very similar (EU BOP) or somewhat higher (FLAR) than what the IMF would charge for a drawing of a comparable size. All RFAs charge commitment fees and several have additional service charges. For a more detailed comparison between the IMF's precautionary credit lines and similar options at RFAs, see Appendix Table A3.

US Fed swap lines vs. IMF precautionary credit lines. In 2008 the US Federal Reserve entered into reciprocal currency agreements (swap lines) with four emerging economies – Brazil, Mexico, Korea, and Singapore –, committing to provide up to US$ 30 billion to each country's central bank. The swap lines represented a significant sum compared to the four economies' (pre-reform) IMF quotas: five to six times the equivalent of the IMF quota for Brazil, Mexico, and South Korea, and fifteen times in the case of Singapore. While a large sum, this is less than what FCL and PLL arrangements can potentially offer for most countries and significantly smaller than Mexico's current US$ 88 billion Flexible Credit Line. Access to the US Fed also remains limited to a small circle of strategically important countries, with unpredictable prospects for future access, and only for very limited periods of time. The 2008 swap line agreement with the four emerging economies concluded in 2010 and has not been renewed since.

The World Bank Deferred Drawdown Option vs. IMF precautionary credit lines. Precautionary instruments exist at the World Bank as well: Indonesia made use of the Development Policy Loan with Deferred Drawdown Option (DPL DDO) in 2009 (World Bank 2013). While qualifying countries would most likely have access to a larger potential credit with more limited conditionality under the FCL or the PLL, the DPL DDO has some advantages over the two IMF instruments in terms of the duration of each agreement and repayment terms. We illustrate how the two compare across key features below, contrasting Indonesia's actual DPL DDO experience in 2009 with a hypothetical PLL (or its predecessor, the PCL) if it had accessed the credit line at a similar point in time - as soon as it became available in 2010[26].

[26] While we cannot be certain that Indonesia would qualify for the FCL or PLL now or that it would have in 2010, in our ranking of qualifying countries based on 2014 and 2015 data (see Section III), Indonesia scores higher on our economic indicators for qualification than FCL qualifiers and it is only slightly behind Morocco on institutional measures. This suggests that Indonesia is likely to be at least PLL eligible, and potentially FCL eligible.

Table 6. Indonesia: Terms under the World Bank's DPL DDO in 2009 and a potential access to the PLL/PCL in 2010

	Potential IMF (PLL) as of 2010	**Actual World Bank DPL DDO in 2009**
Loan amount available	US $14.5 billion per year (500% of pre-reform quota)	US $2 billion approved
Term (length)	2 years; with option to renew	2 years (up to 3 years possible); with option to renew
Repayment period	3.25 – 5 years; interest rate penalty after 3 years	24.5 years final maturity; 10 years grace period
Interest rate	Basic rate of charge, with 200 basis points surcharge for amounts above 3X quota. At PLL inception (August 2010) roughly equivalent to 2.1% for a 5X quota credit line.	6 month LIBOR plus a fixed spread; in 2009 roughly equivalent to: 1.1% + 1.25% = 2.35%
Other fees	Commitment fees (as of 2010): 0.15% up to 2X the quota; then 0.3% up to 10X quota. Would come to about 0.24% for 5X quota. If drawn: 0.5% service charge	0.25% front-end fee (payable upon approval) + 0.5% standby fee[27] (commitment fee) of the undisbursed balance

As Table 6 (above) shows, the amount accessible under the IMF credit lines is likely to be much larger for most economies than funds available as part of a DPL DDO, and thus provides a greater degree of assurance. The minimal conditionality associated with the PLL (or no conditionality under the FCL) is likely to increase the appeal of the IMF's contingent financing further. On the other hand, the repayment period under the World Bank's instrument can be 4-5 times longer than the FCL's or the PLL's, leaving countries with more breathing room if they decide to draw on the funds, and arguably making it the more attractive option from a political perspective as well (deferring repayment to future governments thanks to the generous grace period). The interest rates for the two different credit lines are roughly equivalent. However, the fees associated with undrawn balances is higher for the World Bank's product. Romania's DPL DDO of $1.3 billion, approved in 2012, with a maturity of 12 years (and 11.5 years grace period) points to similar potential advantages and drawbacks vis-à-vis the FCL and the PLL.

Private liquidity insurance vs. IMF precautionary credit lines. In the late 1990s, a handful of countries negotiated contracts for contingent credit lines with private financial institutions, including Argentina and Mexico. Argentina secured a US$ 6.1 billion credit line in December 1996 from a consortium of 13 foreign banks and Mexico secured a US$ 2.5 billion credit line in November 1997 (IMF 1999). Neither of the two turned out to be a sustainable, long-term instrument for crisis prevention or crisis management. The size of the Argentine credit line was tied to the price of bonds used as collateral, and, as a result, the withdrawable amount dropped to $1.5 billion by the time the country called on the funds in 2001 (IMF 2004). When Mexico drew

[27] Currently, the World Bank also charges a 0.5% standby fee (commitment fee) of the undisbursed balance. It is unclear whether this was the case in 2009.

on its credit line in 1998, the banks initially contested the validity of the withdrawal request, and later refused to renew the arrangement. Private liquidity insurance poses several inherent problems: banks have an incentive to hedge their exposure and short the insured country's credit, exacerbating existing vulnerabilities; they may also be unwilling to pay out the agreed sum if a crisis situation does occur (IMF 1999; Ize et al. 2005; Cordella and Levy Yeyati 2006). The size of these two private contingent credit lines is also significantly smaller than what the IMF's FCL or PLL facilities could offer. Even adjusted for inflation, Mexico's US$ 2.5 billion private arrangement would be but a fraction of its current US$ 88 billion FCL credit line.

Reserves vs. IMF precautionary credit lines. Emerging economies' continued use of 'self-insurance' via reserve accumulation suggests that demand for effective crisis prevention tools remains strong[28]. Reserves can be considered the most 'secure' of crisis buffers: they are available immediately and come with no conditions and no potential negative publicity attached due to the involvement of international financial institutions. Globally, the ratio of international reserves to GDP has risen from below 6 percent in 2000 to above 15 percent by 2013, followed by a slow decline that continues to today.

Reserve accumulation carries high opportunity costs, however, particularly in emerging and developing economies, where returns on scarce capital are high and many social needs remain unmet (Moghadam 2010). Rodrik (2006) and, more recently, Gallagher and Shrestha (2012) estimate the social cost of excess reserve accumulation – defined as the differential between the private sector's external cost of borrowing and the yield on reserves - to equal around 1 percent of GDP in developing countries. For a back-of-the-envelope estimate on the social cost of reserves, we can take the EMBI index's average over the first six months of 2016 as a (rough) proxy for the average additional cost of external debt over yields on foreign exchange reserves among potential FCL and PLL users. While the cost of external debt varies from country to country, the combined EMBI for emerging countries can give us a rough idea: the average cost of (excess) reserves was 442 basis points (4.42%) for emerging economies during the first half of 2016. This is above the interest rates offered by the two IMF credit lines and significantly above the costs of an undrawn precautionary line (in the form of commitment fees), which average 0.27% of their credit line per year for the current 3+1 users.

In summary, the IMF's two precautionary instruments offer access to unrivalled amounts of resources more reliably and at a cost that's similar or - as in the case of reserves – significantly lower than offered by comparable liquidity insurance tools. Precautionary credit lines offered by RFAs remain largely untested and access to meaningful amount of funds is linked to a simultaneous engagement with the IMF in most cases. They should thus be viewed as

[28] Countries' motivation for rising reserve accumulation may go beyond a desire for insurance and may, inter alia, reflect efforts to maintain a lower-valued exchange rate for the purpose of encouraging export-led growth. To what extent this has been the case during the last few years is debated (Klein 2015). Either way, 'self insurance' for crisis prevention purposes continues to be a prominent reason for reserve accumulation in the majority of emerging countries (ECB 2006, Silva 2011).

complements rather than substitutes for the IMF's own products. The availability of bilateral swaps, including US Fed swap lines remain uncertain, prone to changes due to political maneuvering, and their duration also tends to be limited. Past experience suggests that privately provided precautionary credit is an even more unreliable and impractical arrangement. While offering more consistency, the World Bank's DPL DDO offers only a fraction of the liquidity available under the FCL or the PLL and would thus provide insufficient insurance for most emerging economies. Finally, reserves may be secure and flexible, but they are also immensely costly. Emerging economies would be hard-pressed to find a better deal than that offered by the FCL or the PLL.

VI. The stigma of IMF engagement: are countries' fears justified?

Given their precautionary nature, qualification for the FCL and the PLL are meant to be free of the stigma associated with traditional access to IMF funds (IMF, 2014b). However, the lack of uptake could be taken to mean that for many governments, having financial ties to the IMF implies they are joining one of the few 'clubs' that would (as Groucho Marx said) take them as a member, yet they would rather not belong to. Indeed, "stigma associated with the use of IMF resources" was rated as one of the most critical factors inhibiting FCL and PLL use in a 2013 IMF-sponsored survey of country authorities in 54 emerging economies and small advanced economies. (IMF 2014a).

It is difficult to distinguish between what might be economic concerns of governments (how will the markets read the government's interest in the instruments?) and political stigma (will association with the IMF carry a political cost?). Eichengreen (2012) highlighted the possibility of governments' fearing that uptake of the instruments would be seen as a signal for economic problems. The report of the IMF survey noted that in some countries civil society opinion leaders and the general public had a predominantly negative image of the IMF - implying a political cost for new applicants (IMF 2014a).

In short, the negative perceptions surrounding a country's association with the IMF seem to be an important obstacle to more widespread use of the two precautionary instruments[29]. Preference for self-insurance through reserve accumulation and access to alternative financing instruments were also among the highest-rated answers, consistent with the possibility that governments are avoiding stigma of one or the other kind. On the economic side, countries may fear that markets will react negatively if they view any engagement with the IMF as a sign of economic and

[29] Another potential reason could be a lack of awareness among policymakers about these relatively new instruments and the terms for their use. As recently as May 2014 Singapore's finance minister was quoted saying that "there is an important space in international finance that is still missing, and that involves quick assistance, quick liquidity at times of crises to well-managed countries without conditionality" (Talley 2014). The 'missing' instrument here describes very closely what the FCL offers - and for which Singapore would very likely qualify. But perhaps the pre-qualification process in itself is considered too intrusive and too stigmatizing by well-managed economies.

financial difficulties. An IMF credit line could exacerbate rather than soften any underlying vulnerabilities. On the political side, policymakers could perceive any agreement with the IMF – even when precautionary, and marketed as a ‘premium’ product with no conditions attached– as a risk to their political reputation, opening them up to criticism from the opposition and the media, and with a potential for losing voters. Our primary focus here is on the more easily quantifiable economic repercussions, though political fears likely play a similarly important role.

The experience of current and past qualifiers’ does not support the existence of an ‘economic stigma’ or negative market reaction. Marino and Volz (2012) show that following the announcement of the first FCL arrangements in 2009, private and sovereign borrowing rates for all three approved users decreased, their exchange rates appreciated, and their stock markets continued to rise. This, of course, need not imply a causal relationship between FCL and PLL access and better economic and financial indicators. Fernandez-Arias and Levy-Yeyati (2010) argue that the financial commitments made at the April 2009 London G20 summit were primarily responsible for positive developments in the markets and that the direct effect of the first FCL arrangements was small and temporary. It is also possible that the three FCL users were already outperforming their peers in their economic and crisis management policies, which led to them being approved to the instrument and to improvement in key indicators at similar times, but independently of each other.

However, where potential applicants’ main concern is an economic stigma, perhaps there is no need to prove that a positive relationship exists between the IMF’s two precautionary instruments and key indicators. It should be sufficient to show that there is no evidence for a negative one. In our research, we found no analyses or reviews that would point to any adverse economic effects of the credit lines. To the contrary - as also mentioned above - all evidence points to considerable potential benefits. A 2011 evaluation of the macroeconomic impact of the FCL by Colombia’s Central Bank found, for example, that Colombia’s FCL arrangement was associated with a 10 basis point decrease in its sovereign risk spread even after controlling for trends in similar countries (IMF 2014d). It was also shown to boost Colombian consumer confidence and even GDP growth. In the case of Morocco’s PLL, five-year credit default swap spreads fell by 16 basis points the day after the arrangement was announced and declined by 40 basis points during the first month (IMF 2014a). Overall, debt capital flows to both confirmed and expected qualifiers have tended to increase, while the exchange rate volatility for both actual and (perceived) potential qualifiers appeared to have declined (IMF 2011; IMF 2014b).

There is not any such before-and-after data on the political side – for example in the form of a negative shift in public opinion in response to a precautionary IMF arrangement. The report cited above refers to some evidence that perceptions about the Fund among policymakers, particularly in Asia – where political stigma, probably as a result of the IMF-supported programs in Thailand, South Korea, and Indonesia during Asia’s 1997-98 currency crisis, remained strong – had since moved from negative to neutral (IMF 2014a).

VII. The time is right for an expansion of the IMF's liquidity insurance

The IMF's two recently introduced precautionary credit lines provide liquidity insurance at a small cost and under favorable conditions. When compared to alternatives that could act as similar crisis prevention tools, the FCL and PLL fare better on close to all criteria than other options. Our analysis in sections III and IV has confirmed that expanding the use the two credit lines from the current 3+1 participating countries to a larger group of emerging economies would be possible, both in terms of countries meeting eligibility criteria and in terms of IMF resource availability.

The FCL and PLL constituted appealing liquidity insurance products at the time of their launch in 2009. Today that is even more the case. The current trend of declining reserves in emerging markets, coupled with changes in the IMF's commitment fee structure in early 2016 have made the FCL and PLL even more attractive and sensible 'investments' for countries seeking greater protection in the face of an increasingly volatile global environment.

The FCL and PLL could complement falling reserve stocks. In contrast to the longer-term global trend of reserve accumulation, a slowdown in net capital inflows during the last two years has resulted in stagnating or falling reserve stocks in a number of emerging economies. Of the 27 economies on our 'potentially FCL or PLL eligible' list, 16 have experienced a decline in their official reserve assets between 2013 and 2015. The FCL and PLL could offer countries a solution to maintaining and even increasing their liquidity during the current period of growing global financial instability and at a significantly lower cost. For the period between 2009 and 2015, the credit lines of the 3+1 FCL and PLL qualifiers equaled, on average, about one third of their foreign currency reserves, ranging from about half of reserves in Mexico to less than one-eighth in Colombia in recent years (Table 7). Changes in the relative size of a country's credit line compared to its reserves reflect both changes in reserve assets as well as changes in the absolute size of the credit lines over the years.

Table 7. Foreign currency reserves (in millions of USD) and the size of the FCL/PLL credit line expressed as a share of reserves

		Colombia	Mexico	Poland	Morocco
2009	Foreign reserves	23,112	94,089	69,741	21,923
	Credit line as % of reserves	45%	50%	29%	N/A
2010	Foreign reserves	26,311	114,934	81,431	21,761
	Credit line as % of reserves	13%	41%	25%	16%
2011	Foreign reserves	29,831	137,149	86,803	18,810
	Credit line as % of reserves	21%	55%	35%	33%
2012	Foreign reserves	34,865	153,497	96,113	15,812
	Credit line as % of reserves	17%	48%	31%	23%
2013	Foreign reserves	41,130	168,196	93,973	17,918
	Credit line as % of reserves	14%	42%	35%	36%
2014	Foreign reserves	44,908	183,778	94,074	18,644
	Credit line as % of reserves	13%	40%	35%	24%
2015	Foreign reserves	44,739	167,353	89,431	21,394
	Credit line as % of reserves	12%	40%	24%	23%

If other, potentially FCL or PLL eligible countries would seek a similar boost to their reserves, it would be well within the limits of the IMF's two precautionary lines. The last column of Table 8 below shows how large a potential FCL or PLL credit line would have to be (in terms of a country's IMF quota) for the 16 potentially eligible countries with a recent decline in official reserves assets to boost their liquidity by one-third. All but two values fall below the PLL's credit limit of 1,000% over two years (and countries with higher demand could still be covered by the no-limit FCL), with the median just over 500% of quota. For most countries, this would also more than cover the size of their reserve loss. The two precautionary credit lines could thus be used not only to make up for declining reserve assets, but would provide an additional improvement in emerging economies' financial resources. As shown earlier, the FCL and the PLL would also provide the same liquidity boost at a significantly lower cost.

Table 8. Losses in official reserve assets as a share of IMF quota for potentially FCL or PLL eligible countries

Country	Change in official reserve assets 2013-2015 (USD millions)	IMF quota (post-reform; USD millions)	Reserve loss as % of IMF quota	Size of credit line equivalent to 1/3 of reserves as a % of IMF quota[30]
Chile	-2,451	2,424	101%	531%
Croatia	-2,798	997	281%	501%
Hungary	-13,578	2,697	504%	408%
Latvia[31]	-4,446	461	963%	249%
Lithuania[32]	-6,376	614	1,038%	92%
Macedonia, FYR	-258	195	133%	423%
Malaysia	-39,621	5,051	784%	629%
Mexico	-2,604	12,389	21%	478%
Peru	-4,166	1,856	225%	1,095%
Philippines	-2,520	2,840	89%	947%
Poland	-11,298	5,692	198%	556%
Slovenia	-67	816	8%	35%
South Africa	-3,801	4,241	90%	360%
Thailand	-10,719	4,465	240%	1,169%
Turkey	-20,502	6,476	317%	569%
Uruguay	-641	596	108%	874%

The price is right: commitment fees for most countries now lower than in 2015. Substituting or supplementing a country's own reserves with a precautionary credit line has also become cheaper following the implementation of the IMF quota reform in 2016, particularly for countries looking to access a larger sum (above 1,000% of their pre-reform quotas). Depending on the level of access, countries can save the equivalent of tens of millions of dollars due to a change in the commitment fee pricing structure. Take Mexico: before the quota reform became effective, it had a credit line of US$ 65.7 billion, equivalent to 1,304% of its (pre-reform) quota, and paid an estimated US$ 228 million in annual commitment fees. The fees were calculated based on the following pricing structure: 15 basis points for amounts up to 200% of the (pre-reform) quota, 30 basis points on amounts between 200% and 1,000% of the (pre-reform) quota and 60 basis points on amounts above 1,000% of the (pre-reform) quota. If Mexico had agreed to borrow the same US$ 65.7 billion after the quota reform had become effective, it would represent 523% of its new quota, and the country would be charged only an estimated US$ 175.5 million in commitment

[30] Compared to their 2015 level

[31] Latvia joined the Eurozone on January 1, 2014. The large reserve loss is due to its Euro holdings no longer being counted as reserve assets.

[32] Lithuania joined the Eurozone on January 1, 2015. The large reserve loss is due to its Euro holdings no longer being counted as reserve assets.

fees – a 'saving' of US$ 52.5 million a year[33]. The reduction is a result of new commitment fee pricing that only charges 30 basis points for amounts up to 575% of the (new) quota[34]. Table 9 below shows how the commitment fees for each of the 3+1 precautionary credit line users would change under the new pricing structure if their access in nominal terms had stayed the same as it was by end-2015.

Table 9. Commitment fee pricing before and after the implementation of the quota reform

		Colombia	Mexico	Poland	Morocco
Pre-reform commitment fee pricing	Total access by end-2015 (in USD millions)	5,380	65,718	21,545	4,497
	Total access (in % of pre-reform quota)	500%	1,304%	918%	550%
	Annual commitment fee (in USD millions)	**12.91**	**228.00**	**57.59**	**11.04**
Post-reform commitment fee pricing	Total access (in USD millions)	5,380	65,718	21,545	4,497
	Total access (in % of post-reform quota)	188%	523%	376%	359%
	Annual commitment fee (in USD millions)	**11.20**	**175.47**	**54.74**	**11.33**
	Change in annual commitment fees (in USD millions)	**-1.71**	**-52.53**	**-2.85**	**+0.29**

Countries whose post-reform quota is at least 1.74 times greater than their old quota (71% of all IMF member states; 78% of our 47 FCL/PLL shortlisted countries) can now have access to the same credit line for a lower commitment fee. We list the decrease in commitment fees for amounts equivalent to 1,000% and 1,300% of the pre-reform quota in the Appendix (Table A4) for the 47 shortlisted countries that we included in the calculations of our FCL/PLL eligibility index.

VIII. Concluding note: The supply side?

On the demand side, the case for member states to apply for a precautionary credit line appears to be clear-cut. In requesting access to the FCL and the PLL, countries appear to have little to lose and a great deal to gain. Moreover, a greater number of emerging economies with access to precautionary lending would – arguably – also create positive spillovers for other non-access countries and would improve the stability of the global financial system as a whole. Given an increasingly volatile global environment and the emergence of new economic and political risks, it may mean the difference between the next global financial crisis and global financial stability.

However, to what extent the IMF is willing to accommodate the potential rise in demand for its precautionary instruments remains an open question. Is the supply of, rather than the demand for,

[33] Mexico cancelled its FCL following quota-reform implementation and requested and received a lager credit line. It now pays about $290 million in commitment fees. Under the pre-reform commitment fee structure, it would have paid about $362 million.
[34] The new (post-quota reform) commitment fee structure is: 15 basis points for amounts up to 115% of the quota, 30 basis points on amounts between 115% and 575% and 60 basis points on amounts above 575%.

the credit lines the “binding constraint”? Determining a country’s eligibility for the FCL and the PLL is entirely at the discretion of the IMF’s staff and its Board. Though its motivation and constraints differ from that of private insurance companies, in its role as an ‘insurance provider’, the IMF faces the well-known issue of adverse selection. Demand for its precautionary credit lines will most likely come from countries that believe themselves to be the most vulnerable, while the IMF is looking to insure those that have the most robust economic and policy fundamentals, and thus the least need for liquidity support. Combined with no or limited ex-post conditionality, and the resulting decrease in its influence on the direction of economic policymaking, this might make the Fund hesitant to accept further applications.

At the same time, the Fund’s own reviews of the FCL and the PLL (IMF 2011, IMF 2014b, IMF 2014c) and continuous reforms to make its precautionary instruments more attractive over time point towards the IMF’s readiness to extend them to a wider pool of member states (and with it, strong awareness of their large potential global benefits). Providing extended opportunities for liquidity insurance to its members is clearly in the IMF’s own interest as the warden of global financial stability. Yet it can certainly do more to re-enforce its commitment to its precautionary credit lines and to encourage applications from a greater number of countries.[35]

[35] In a forthcoming CGD brief, we outline specific recommendations to the IMF that would dispel potential applicants’ concerns and encourage update of the instruments– taking into account its past emphasis on conditionality.

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APPENDIX

Note on the exclusion criteria for eligibility index.

We excluded from our list of potential FCL and PLL qualifiers 141 countries (of a total of 188) where we judged the countries to be non-eligible based on the IMF's minimum eligibility requirements and its four exclusion criteria for qualification or where the countries' application for an IMF credit line was assessed to be highly unlikely. The categories of excluded member states and reasons for their exclusion are listed below:

- Member states that would qualify for concessional IMF lending under the Poverty Reduction and Growth Trust. These countries would have little incentive to apply for a credit line or loan which is more expensive and has less favorable conditions than concessional lending. Most would also very likely not qualify as low-income countries tend to have very limited access to international capital markets – an exclusion criterion for the PLL (and the FCL). This led to the exclusion of 73 member states.

- Member states that have active lending agreements with the IMF. Countries with active stand-by arrangements or extended fund facility arrangements require substantial policy adjustments, which make them ineligible for the FCL and the PLL. This led to the exclusion of 14 additional member states, including Pakistan, Romania, and Ukraine.

- Member states with an ongoing (civil) war (in addition to countries already excluded under the conditions above: Libya and Syria), as the ongoing conflict in these countries indicates a highly unstable and unpredictable institutional context and makes monitoring close to impossible.

- Member states with significant data shortcomings. A significant shortcoming in any of the five main (PLL or nine FCL) qualification areas make a country non-eligible. The lack of data would make it very difficult to establish whether a country qualifies in the first place and would also hamper further monitoring. Countries excluded under this condition include countries with delays in completion of Article IV consultations over 18 months or mandatory stability assessments over 18 months (e.g. Argentina and Venezuela) and total 17 countries (not already excluded via the criteria above).

- Member states with outstanding credit obligations to the IMF would very likely not meet the 'sustained track record of very strong policies' standard required for the FCL and would also fall short of the strong fiscal, monetary, and financial sector performance required by the PLL (though qualification would be more likely for this instrument).

- High-income member states with excellent capital market access – defined as a Standard & Poor's sovereign credit rating of AA or above - including economies issuing reserve currencies. These countries are very likely to find precautionary lending unnecessary (for example: Germany, Sweden, Japan, USA). We have also excluded Spain and Italy who do not fit the credit rating criteria above, but who we also consider highly unlikely contenders for precautionary credit.

Table A1. Indicators and data used to create eligibility index

	PLL criteria	FCL criteria	Our Indicators	Data Source & Year
1	External position and market access	Sustainable external position	External debt/ GDP	IMF (2014)
2		Capital account position dominated by private flows	None	None
3		Track record of steady sovereign access to international capital markets at favorable terms	Sovereign credit ratings	Standard and Poor's as of 01/2016 (Moody's when no S&P rating)[36]
4		Reserve position which remains relatively comfortable	Short-term external debt/ Intl reserves; Current account deficit	IMF (2014) IMF WEO (Oct 2015): projection for 2015
5	Fiscal policy	Sound public finances, including sustainable public debt position	Gross government debt/GDP Fiscal balance	IMF WEO (Oct 2015): projection for 2015 IMF WEO (Oct 2015): projection for 2015
6	Monetary policy	Low and stable inflation, in the context of a sound monetary and exchange rate policy	Standard deviation of inflation over 10 years	IMF (2005-2014)
7	Financial sector soundness and supervision	Absence of bank solvency problem that pose an immediate threat of a systemic banking crisis	Capital Adequacy Ratio (CAR)	IMF Financial Soundness Indicators, latest available (2015/2014)
8		Effective financial sector supervision	WGI Regulatory Quality	World Bank/ Kaufmann, Kraay, Mastruzzi (2014)
9	Data adequacy	Data transparency and integrity	None	None

[36] Source: https://en.wikipedia.org/wiki/List_of_countries_by_credit_rating; Credit rating conversion into numbers based on Kaminsky and Schmuckler (2001), Appendix Table 2: http://home.gwu.edu/~graciela/HOME-PAGE/RESEARCH-WORK/WORKING-PAPERS/rating-agencies.pdf.

Table A2. Alternative country eligibility index
(index of governance and economic indicators weighted equally)

Rank	Country	Rank	Country	Rank	Country
1	Estonia	21	Bulgaria	41	Belize
2	Chile	22	FYR Macedonia	42	Paraguay
3	Israel	23	South Africa	43	Ecuador
4	Korea	24	China	44	Egypt
5	Lithuania	**25**	**Colombia**	45	Lebanon
6	Czech Republic	**26**	**Mexico**	46	Belarus
7	Slovenia	27	Malta		
8	Malaysia	28	Peru		
9	Latvia	29	Panama		
10	**Poland**	30	Indonesia		
11	Mauritius	31	El Salvador		
12	Slovak Republic	32	Brazil		
13	Uruguay	**33**	**Morocco**		
14	Botswana	34	Kazakhstan		
15	Hungary	35	Montenegro		
16	Costa Rica	36	Russia		
17	Croatia	37	Guatemala		
18	Thailand	38	Fiji		
19	Turkey	39	India		
20	Philippines	40	Azerbaijan		

Table A3. Comparison of select characteristics of the FCL and the PLL with similar instruments at RFAs

	IMF: FCL	IMF: PLL	CMIM-PL (Asia)	FLAR (LatAm): contingency credit	EU balance of payments assistance
Loan amount available	Unlimited (assessed on a case-by-case basis)	250% of quota in 1st year 500% of quota over 2 years	Varies: from 800% of IMF quota equivalent (Philippines) to 72% of IMF quota equivalent (Brunei Darussalam) 30% of max. amount available without IMF involvement	2X paid-in capital; from 256% of IMF quota equivalent (Costa Rica) to 25% of IMF quota equivalent (Venezuela)	EUR 50 billion cap on total of outstanding loans; usually given in conjunction with other international financial assistance Amounts vary from EUR 1.4 billion (Romania) to EUR 6.5 billion (Hungary)
Eligibility	An unspecified number of IMF member states with "very strong" fundamentals and policies	An unspecified number IMF member states with "sound" fundamentals and policies	CMIM members (13 Asian countries) who meet five criteria for ex ante qualification	FLAR members (8 Latin American countries)	EU member states that are not members of the Eurozone (9 countries, of which 3 are very unlikely users)
Max. term (length)	2 years; with unlimited options to renew	2 years; with unlimited options to renew	6 months; with max. three renewals (max. 2 years)	6 months; renewable	2 years for precautionary programs
Maturity	3.25 – 5 years; interest rate penalty after 3 years	3.25 – 5 years; interest rate penalty after 3 years	1 year for IMF-linked portion; 6 months for IMF de-linked portion (max. 30%)	6 months; can be extended to 1-year maximum	Medium-term assistance for disbursed loans (5 years+)
Conditionality	None; annual review	Yes; bi-annual review	Decided by CMIM Executive-Level Decision-Making Body	None	Yes;
Interest rate	Basic rate of charge, with 200 basis points surcharge for amounts above 187.5% quota. Surcharge of 300 basis points if credit above 187.5% after 3 years.	Basic rate of charge, with 200 basis points surcharge for amounts above 187.5% quota. Surcharge of 300 basis points if credit above 187.5% after 3 years.	Unknown (?)	3 months LIBOR + 100 basis points	'AAA' loan rates obtained by the EU on international financial markets • Hungary: 3.25% on EUR 4 billion (2008/09) and 3.625% on EUR 1.5 billion (2009) • Latvia: 3.2% on EUR 2.9 billion (2009/2010) • Romania: 3% on EUR 5 billion (2009-2011)
Commitment fees	0.15% up to 115% of quota; then 0.3% up to 575% of quota; and 0.6% above 575% of quota.	0.15% up to 115% of quota; then 0.3% up to 575% of quota; and 0.6% above 575% of quota.	0.15% of credit line	0.5% of credit line	Unknown (no data)
Other fees	If drawn: 0.5% service charge	If drawn: 0.5% service charge	Unknown (no data)	Service charge of 0.1%	Unknown (no data)

Table A3 (continued).

	ESM: PCCL	ESM: ECCL	BRICS CRA Precautionary instrument	World Bank DPL DDO
Loan amount available	No set limit; as agreed with the ESM Board of Governors	No set limit; as agreed with the ESM Board of Governors	Varies; from 236% of IMF quota equivalent (South Africa) to 48% of IMF quota equivalent (China) 30% of max. amount available without IMF involvement	No set limit; largest previously approved DPL DDO was of $2 billion (Indonesia)
Eligibility	ESM member states (19 EU member states, which are also Eurozone members) with "sound" economic and financial fundamentals (meeting 6 criteria)	ESM member states (19 EU member states, which are also Eurozone members), who do not meet PCCL eligibility criteria, but have "sound" fundamentals	Five BRICS countries: Brazil, China, India, Russia, South Africa	All IBRD-eligible borrowers with "appropriate macroeconomic policy framework"
Max. term (length)	1 year; renewable twice for 6 months each	1 year; renewable twice for 6 months each	6 months (without IMF arrangement); renewable three times OR 1 year (with IMF arrangement); renewable twice	3 years; renewable
Maturity	Defined on a case-by-case basis	Defined on a case-by-case basis	1 year for IMF-linked portion; 6 months for IMF de-linked portion (max. 30%)	Defined on a case-by-case basis; up to prevailing maturity limits (up to 25 years)
Conditionality	Some; enhanced surveillance if PCCL is drawn	Yes; enhanced surveillance	Unknown (no data)	None; monitoring to ensure compliance with drawdown conditions
Interest rate	Base Rate = Cost of funding and operations incurred by ESM, derived by a daily computation of the actual interests accrued on all of ESM's funding instruments + Margin = 0.35%	Base Rate = Cost of funding and operations incurred by ESM, derived by a daily computation of the actual interests accrued on all of ESM's funding instruments + Margin = 0.35%	"The interest rate […] shall be an internationally accepted benchmark interest rate for the corresponding maturity of the swap transaction plus a spread. The spread shall increase periodically by a certain margin, up to a predetermined limit."	6 months LIBOR + the prevailing fixed or variable spread for regular IBRD loans at time of each drawdown
Commitment fees	If undrawn, fee reflects the max. agreed amount of single disbursement; if drawn, fee reflects the max. agreed amount of single disbursement and in addition the outstanding amount under the precautionary credit line.	If undrawn, fee reflects the max. agreed amount of single disbursement; if drawn, fee reflects the max. agreed amount of single disbursement and in addition the outstanding amount under the precautionary credit line.	As specified in the inter-central bank agreement	0.5% standby-fee on the undisbursed balance
Other fees	Service fee: 0.5% upfront, 0.005% p.a. for amounts drawn	Service fee: 0.5% upfront, 0.005% p.a. for amounts drawn	Unknown (no data)	0.25% front-end fee, due within 60 days of effectiveness date

Table A4. Commitment fees before and after the implementation of the quota reform (all values in USD millions)

Country	Pre-reform quota	Post-reform quota	Pre-reform commitment fee for credit line at 1000% of pre-reform quota	Post-reform commitment fee for credit line equivalent to 1000% of pre-reform quota	'Savings[37]' based on a 1000% pre-reform credit line	Pre-reform commitment fee for credit line at 1300% of pre-reform quota	Post-reform commitment fee for credit line equivalent to 1300% of pre-reform quota	'Savings[38]' based on a 1300% pre-reform credit line
Azerbaijan	223.79	544.88	6.04	5.77	0.27	10.07	7.79	2.28
Belarus	536.54	947.98	14.49	14.46	0.03	24.14	23.86	0.28
Belize	26.41	37.53	0.71	0.87	-0.16	1.19	1.35	-0.16
Botswana	122.32	273.83	3.3	3.2	0.11	5.5	4.35	1.16
Brazil	5908.89	15348.38	159.54	150.79	8.75	265.9	203.97	61.93
Bulgaria	889.6	1245.44	24.02	29.74	-5.72	40.03	45.76	-5.72
Chile	1189.84	2424.16	32.13	31.51	0.61	53.54	46.81	6.73
China	13241.14	42371.37	357.51	324.14	33.37	595.85	443.31	152.54
Colombia	1075.86	2842.55	29.05	27.37	1.68	48.41	37.06	11.36
Costa Rica	259.93	512.91	7.02	6.91	0.1	11.7	10.54	1.15
Croatia	507.35	996.63	13.7	13.5	0.2	22.83	20.66	2.17
Czech Republic	1392.78	3030.2	37.61	36.56	1.05	62.68	51.14	11.54
Ecuador	483.72	970.22	13.06	12.84	0.22	21.77	19.32	2.45
Egypt	1312.16	2831.43	35.43	34.48	0.95	59.05	48.62	10.43
El Salvador	237.69	398.93	6.42	6.69	-0.27	10.7	10.97	-0.27
Estonia	130.66	339.16	3.53	3.33	0.19	5.88	4.51	1.37
Fiji	97.3	136.22	2.63	3.25	-0.63	4.38	5.00	-0.63
Gabon	214.06	300.24	5.78	7.15	-1.37	9.63	11.00	-1.37
Guatemala	291.9	596.31	7.88	7.73	0.15	13.14	11.45	1.68
Hungary	1442.82	2696.6	38.96	38.63	0.32	64.93	61.37	3.55

[37] Positive values signal a reduction in post-reform commitment fees for a credit line equivalent to 1000% of the pre-reform quota. Negative values signal an increase in post-reform commitment fees for a credit line equivalent to 1000% of the pre-reform quota.

[38] Positive values signal a reduction in post-reform commitment fees for a credit line equivalent to 1300% of the pre-reform quota. Negative values signal an increase in post-reform commitment fees for a credit line equivalent to 1300% of the pre-reform quota.

India	8092.58	18228.46	218.5	211.33	7.17	364.17	285.34	78.83
Indonesia	2889.81	6460.72	78.02	75.55	2.48	130.04	102.81	27.23
Israel	1474.79	2670.19	39.82	39.64	0.18	66.37	64.37	2.00
Kazakhstan	594.92	1609.62	16.06	15.07	0.99	26.77	20.43	6.35
Korea	4678.74	11930.37	126.33	119.78	6.54	210.54	161.89	48.65
Latvia	197.38	461.48	5.33	5.13	0.2	8.88	6.90	1.98
Lebanon	369.74	881.26	9.98	9.57	0.41	16.64	12.90	3.74
Lithuania	255.76	614.38	6.91	6.61	0.29	11.51	8.91	2.59
Macedonia	95.91	194.6	2.59	2.54	0.05	4.32	3.79	0.53
Malaysia	2465.86	5051.26	66.58	65.26	1.32	110.96	96.49	14.47
Malta	141.78	233.52	3.83	4.08	-0.25	6.38	6.63	-0.25
Mauritius	141.78	197.38	3.83	6.12	-2.3	6.38	7.31	-0.93
Mexico	5040.14	12389.07	136.08	129.83	6.25	226.81	175.19	51.61
Montenegro	38.92	84.79	1.05	1.02	0.03	1.75	1.43	0.32
Morocco	817.32	1242.66	22.07	25.46	-3.39	36.78	40.17	-3.39
Panama	287.73	524.03	7.77	7.73	0.04	12.95	12.50	0.45
Paraguay	139	279.39	3.75	3.69	0.06	6.25	5.54	0.71
Peru	886.82	1855.65	23.94	23.4	0.54	39.91	33.96	5.95
Philippines	1416.41	2839.77	38.24	37.59	0.65	63.74	56.60	7.14
Poland	2346.32	5692.05	63.35	60.57	2.78	105.58	81.69	23.90
Russia	8263.55	17936.56	223.12	216.97	6.15	371.86	304.21	67.65
Slovak Republic	594.92	1391.39	16.06	15.45	0.62	26.77	20.80	5.97
Slovenia	382.25	815.93	10.32	10.06	0.26	17.2	14.33	2.87
South Africa	2597.91	4240.89	70.14	75.4	-5.26	116.91	122.17	-5.26
Thailand	2002.99	4464.68	54.08	52.39	1.69	90.13	71.52	18.62
Turkey	2023.84	6476.01	54.64	49.54	5.1	91.07	67.76	23.31
Uruguay	426.73	596.31	11.52	14.29	-2.77	19.2	21.97	-2.77