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How Deposit Insurers Account for Inflation: Practices and Existing Guidance

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International Association of Deposit Insurers

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HOW DEPOSIT INSURERS ACCOUNT FOR INFLATION: PRACTICES AND EXISTING GUIDANCE

Executive Summary

IADI Guidance in place recommends a review of deposit insurance coverage levels more frequently than every five years if consumer price inflation is high. This review may not necessarily lead to a change of coverage levels. Although data availability on this topic is very limited, we find:

- On a self-reported basis and irrespective of inflation, only half of deposit insurers "periodically" review the coverage level. Although this share has been growing over the past decade, evidence from a sub-sample suggests that irrespective of inflation, periodic review of coverage levels by deposit insurers may regularly take place at intervals exceeding five years.
- Linking data on coverage review to historical inflation figures on an individual jurisdictional level, we found no substantial evidence that high inflation correlates with more regular periodic review of coverage levels.
- As to changes of coverage levels – which are observable, in contrast to reviews – we find some early evidence to suggest that coverage levels are adjusted more frequently in jurisdictions with higher levels of inflation.

IADI Guidance states that inflation may inform a review of coverage levels, or could trigger it, but leaves it up to the jurisdiction's policymakers to decide on any changes in coverage levels. We find:

- Only six jurisdictions index deposit insurance coverage to inflation. We illustrate two main practices in indexing as well as other governance arrangements that allow for fast-track changes to coverage levels as an alternative to lengthy legal procedures for changing coverage levels.
- A first group of indexing jurisdictions (Mexico, Uruguay, Tajikistan) adjusts coverage in an automated way to inflation. They express coverage not in nominal currency terms, but in an inflation-proof index. The adjustment of the index to inflation may take place more or less frequently and leads to nominal-term changes in coverage without further need for action by lawmakers or deposit insurers.
- A second group of indexing jurisdictions (Peru, El Salvador, Ecuador) adjusts nominally expressed coverage in a semi-automated way to inflation. This adjustment is mandatory by law but requires a decision by an administrative body.
- Jurisdictions that do not index coverage levels to inflation (>90%) can adjust coverage levels to inflation – if necessary – through their respective legal procedures for the review of coverage levels. As these can be lengthy, we illustrate institutional arrangements for fast-track changes in the USA, the EU and Switzerland. These fast-track powers are limited in scope to inflationary adjustments and thus differ from the wide-scoped powers granted to some deposit insurers to change coverage levels, which may or may not include inflation indexing (e.g. in the Philippines).

As points of consideration, we note:

- Even more so in times of high inflation, the ability to conduct periodic reviews of coverage levels presupposes the availability of data on coverage ratios. We find indications that this may be improved.
- Frequent changes of the coverage level because of inflation adjustments may impact negatively on public awareness. However, the use of widely accepted inflation-proof index-units may lower this risk.
- Inflation-induced increases in coverage levels can create financial risks to the deposit insurer if the fund size does not grow proportionally. This may be particularly applicable during periods of sudden and high inflation, and this environment is likely to correlate with reduced stability in the financial sector and higher probabilities of bank default(s).

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1 Introduction

In an earlier Policy Brief[1], we discussed how inflation[2] affects deposit insurers through two key metrics: the coverage level and coverage ratio. We outlined the concept of a "real coverage level" and demonstrated the – in part – substantial decreases in real coverage levels in a number of jurisdictions since their last change in coverage level. For several jurisdictions, we uncovered some evidence to suggest that keeping real coverage levels constant may have been guiding decision-makers when changing nominal coverage levels. Coverage ratios of deposit insurers are impacted by inflation as they influence the growth and distribution of nominal deposits.

Setting an appropriate level of coverage is essential in promoting effective deposit insurance. Levels set too high can impose unnecessary costs on member institutions and increase moral hazard risks if a substantial proportion of deposits are no longer exposed to market discipline.[3] On the other hand, levels set too low may cause depositors to run on their bank at times of heightened risk, thus leading to suboptimal outcomes for financial stability.

Inflation further complicates this exercise through its negative effects on real coverage. Depending on its impact on growth and the distribution of deposits, inflation is likely to exert pressure on deposit insurers to increase coverage levels. Lowering the probability of a bank-run through increased coverage levels may also help avoid inflation-induced financial instability. However, the timing of such an increase may be very delicate. First, any increase in coverage is likely to be accompanied with an increase in premiums. Such a cost on member banks may be counterproductive in times of high inflation. Also, if bank defaults materialise and are subject to increased coverage levels, the deposit insurer itself may not yet have the necessary additional funds available to reimburse depositors.

Contingent upon further (monetary policy) developments, it cannot be excluded that the recent uptake of inflation in economies which have witnessed long periods of historically low inflation, will spur discussions on the adequacy of existing nominal coverage limits. To most deposit insurers, this would be a change that has not been anticipated for quite some time. In a June 2020 survey[4], 79% of deposit insurers signalled no concerns regarding their current coverage level. At the time, half of deposit insurers (especially in developed economies) did not foresee any change in the coverage limit until 2025.

This Policy Brief offers an overview on how inflation is taken into consideration by international standards and procedures relevant to deposit insurers. We first set out in section 2 how standards guide deposit insurers in incorporating inflation in their activities. Following that, and drawing upon existing evidence, in section 3, we look at how inflation is integrated into practices applied by deposit insurers. Section 4 sets out a number of decision-making arrangements by deposit insurers in dealing with inflation. Section 5 offers points of consideration and section 6 concludes.

2 International Standards on Inflation and Deposit Insurance Coverage

2.1 IADI Core Principles and Handbook

The IADI Core Principles do not explicitly address inflation, but the Handbook does mention it as a factor that is relevant to the frequency of review coverage.

- **Core Principle 8** on Coverage as well as the essential criteria thereof focus on a clear definition of coverage, that should be "limited, credible and cover most depositors but leave a substantial number of deposits exposed to market discipline".
    - **Essential Criteria 5** prescribes that the level and scope of coverage are reviewed periodically (e.g. at least every five years) to ensure that it meets the public policy objectives of the deposit insurance system.
- The **Handbook**[5] further refines the appropriateness of the review period for deposit insurance coverage. It links the appropriate frequency of review of coverage levels to the extent to which financial conditions could undermine stability. In stable times, a review every five years may be appropriate. Under conditions of rapidly

[1] Van Roosebeke & Defina (2022)
[2] Inflation is a measure for the increase of time of prices – oftentimes consumer prices.
[3] IADI Core Principle 8 – Coverage specifies that "Coverage should be limited, credible and cover the large majority of depositors but leave a substantial amount of deposits exposed to market discipline."
[4] The 2020 IADI Survey on Deposit Insurer Coverage and Scope consists of 52 respondents and is broadly representative of the IADI membership.
[5] IADI (2016)

changing financial structures or high inflation, a more frequent review may be justified.

2.2 IADI Guidance Paper on Coverage

Through a 2013 Guidance Paper, IADI – at the request of the FSB – provided enhanced guidance on coverage. This guidance sought to strike a balance between depositor protection, financial stability, and market discipline.[6] In doing so, the IADI Guidance Paper notes inflation as a consideration in coverage level review.

The guidance points highlight a need for regular review of coverage limits, and to take inflation into account when doing so. The guidance acknowledges that "real, effective coverage limits may deteriorate over time and (…) inflation can diminish the real value of deposit insurance, the composition and the size of deposits may change, and new deposit instruments may be introduced."

It also explicitly mentions inflation as a factor that may trigger review, and where necessary, lead to the adjustment of coverage limits (as inflation is likely to influence the size and composition of deposits). Adjustments can be made on an ad hoc basis or may be made automatically, such as through indexing.

2.3 Summary

IADI standards offer guidance on how deposit insurers should consider inflation in reviewing coverage levels. Existing guidance includes the following two elements:

- High inflation should lead to a review of coverage levels more frequently than every five years. However, this review may not necessarily lead to an adjustment of the coverage level.
- Inflation may inform a review of coverage levels or could trigger it. Regarding the governance process of (inflation-motivated) changes in coverage levels, there is no explicit guidance on such adjustments being made on an ad hoc basis or automatically i.e. via indexing.

3 Coverage review and change in the light of inflation: Some observations on deposit insurers' practices

The following offers some insight as to how inflation-related guidance is being taken into consideration by deposit insurers. However, this overview is incomplete due to limited data availability and as a number of variables cannot be directly observed, hence attention is directed to imperfect proxies. The main source of data is the IADI Annual Survey and an ad hoc survey of IADI members on coverage that was conducted in June 2020.

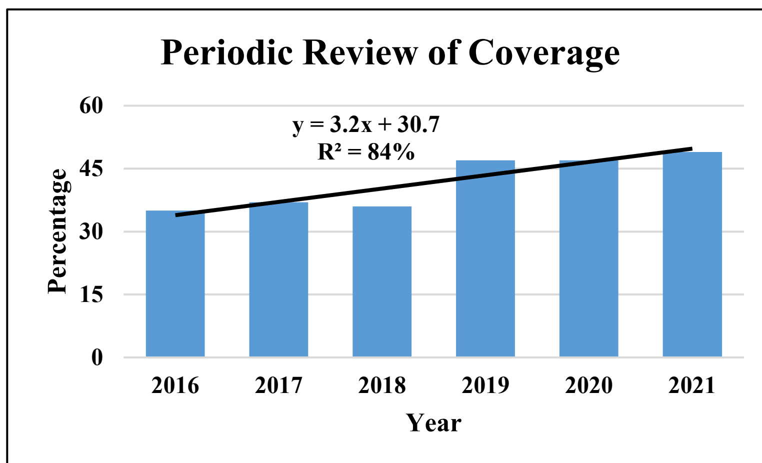
3.1 Inflation and the frequency of reviewing coverage

Given non-negative rates of inflation, unchanged nominal DI coverage levels will gradually erode in real terms over time. Earlier research has indicated that in some jurisdictions this erosion has proven to be substantial.[7] With this in mind, IADI guidance suggests more frequent coverage reviews when inflation is high.

Gathering insights on deposit insurers' practices at this point is challenging. The guidance does not define what "high" inflation may be, and data is not available on the frequency of coverage reviews by deposit insurers.[8] The best available data originates from the IADI Annual Survey and covers the existence of periodic reviews of the coverage limit. These figures are self-reported by IADI members and therefore do not constitute a formal compliance assessment with third party verification. Also, the fact that initiating or conducting a review may not necessarily fall under the formal deposit insurer remit may lead to data that is misrepresentative.[9]

[6] IADI (2013)
[7] Van Roosebeke & Defina (2022)
[8] Coverage reviews should not be confused with coverage changes. A review is not necessarily required to lead to any change.
[9] For example, the EU coverage level is to be reviewed "periodically by the Commission and at least once every five years" (Art. 6 (6) DGSD). Most likely on this basis, roughly half of EU deposit insurers participating in the Annual Survey have reaffirmed such periodic review taking place. The other half of respondents did not reaffirm this notion which may be explained by the fact the deposit insurer is not conducting this review.

Irrespective of inflation, data collected from the 2021 IADI Annual Survey (see adjacent chart) indicate that approximately 50% of deposit insurers "periodically" review their coverage level. This is an increase on the 35% observed six years earlier i.e. average annual linear growth of 3.2 percentage points.



Source: IADI Annual Survey and authors

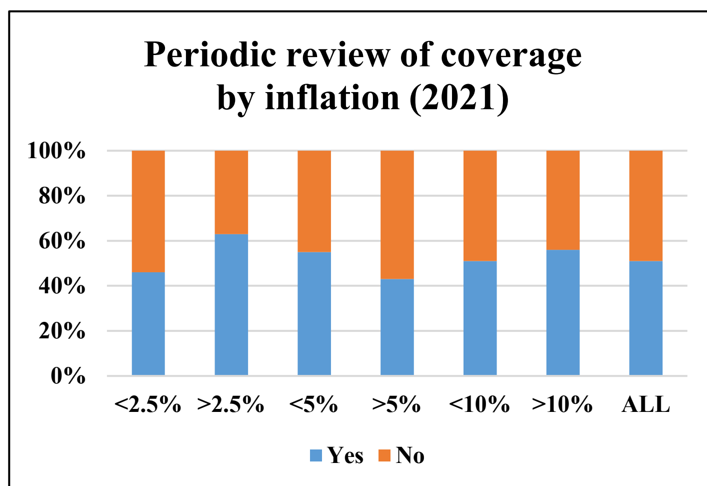
Whereas Core Principle 8 (Essential Criteria 5) suggests a review is conducted "periodically" (e.g. "at least every five years"), the IADI Annual Survey does not define how often a review can take place to be classed as "periodic" and hence does not allow for accurate conclusions on this matter.

Another data source offers additional insight. According to data from some 50 respondents to the 2020 ad hoc survey, for 67% of deposit insurers, a periodic review of the coverage levels is not obligatory, neither by law nor by internal policy. 64% of deposit insurers had not reviewed coverage levels since the latest change, which – on average – took place 9.6 years before. Of the 13 respondents that changed coverage levels in the preceding five years, only two (15%) have since reviewed their coverage level. Although rather small, and mindful of the caveats mentioned above, this sample suggests that – irrespective of inflation – periodic review of coverage levels by deposit insurers may take place at intervals in excess of five years.

To compensate for the lack of data on whether "high" inflation jurisdictions review coverage levels more regularly – as the Core Principles expect – and to test whether long-run jurisdiction-specific inflation levels drive the degree of periodic coverage review; in the following, amongst the Annual Survey respondents we distinguish between low and high inflation jurisdictions. We use three thresholds to do so: 2.5%, 5% and 10% and overlay annualised inflation rates from 2021 (accordingly to IMF published statistics). 2021 is chosen not merely for the purpose of convenience, but also to capture a level of inflation that may correlate with rates that have been typical in the recent past, as opposed to the somewhat heightened levels of inflation thus far observed in 2022.

TABLE ONE: PERIODIC REVIEW OF COVERAGE BY INFLATION (2021)		
Inflation (2021)	**Sample proportion**	**Conduct periodic review**
<2.5%	31%	46%
>2.5%	69%	63%
<5%	65%	55%
>5%	35%	43%
<10%	90%	51%
>10%	10%	56%
All	*100%*	*51%*

Source: IADI Annual Survey 2021, IMF and authors

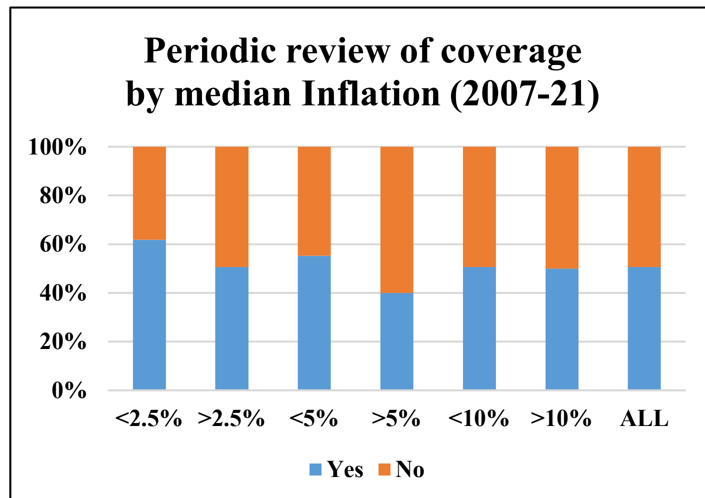


One could assert that those jurisdictions typically experiencing high levels of sustained inflation will be more likely to adapt their DI system design such that a periodic coverage review is formally – and possibly more regularly – considered. However, data does not univocally support this hypothesis. At the 2.5% and 10% level, the share of "high inflation" respondents that reports to conduct a periodic review of coverage is above the share in "low inflation" jurisdictions (respectively 63% vs. 46% and 51% vs 56%). However, we observe opposite evidence of an association between the pursuit of periodic reviews and the level of inflation at the 5% threshold. In these cases, the share of deposit insures reporting a periodic review is higher in low inflation jurisdictions.

Accommodating for a potential recency bias when incorporating 2021 inflation figures only, the following shows the results of taking into account median inflation over the past 15 years and sorting low/high inflation jurisdictions using the same thresholds.

TABLE TWO: PERIODIC REVIEW OF COVERAGE BY MEDIAN INFLATION		
Median inflation (2007-21)	**Sample proportion**	**Conduct periodic review**
<2.5%	41%	62%
>2.5%	59%	51%
<5%	70%	55%
>5%	30%	40%
<10%	90%	51%
>10%	10%	50%
All	*100%*	*51%*

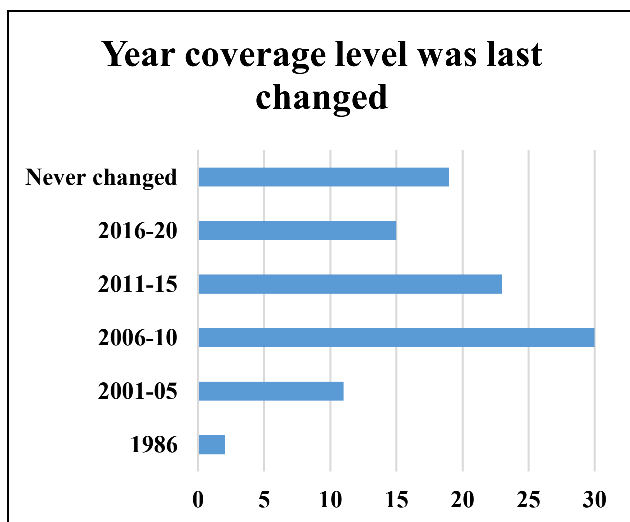
Source: IADI Annual Survey, IMF and authors



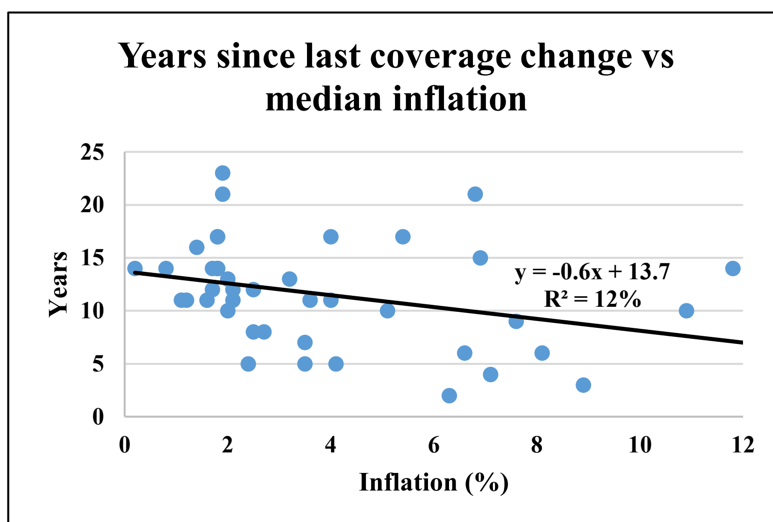
Results here add to the earlier findings that high inflation does not correlate with a more regular periodic review of coverage levels. In fact, when using inflation data of the past 15 years, "high" inflation jurisdictions tend to conduct more seldom periodic reviews of their coverage levels.

3.2 Inflation and the frequency of changing coverage

As distinct from coverage level reviews, changes of coverage levels can be directly observed and hence the availability of data is generally higher. Coverage level changes can be assumed to be preceded by a coverage level review. However, the decision to not only review, but to actually change coverage levels is generally not solely under the authority of deposit insurers but may involve financial-safety net partners and/or political institutions. In other words: although easier to observe, coverage level changes may underestimate the frequency of coverage level reviews and must not necessarily go back to the initiative of the deposit insurer.



Source: IADI (2021)



Source: IADI (2021), IMF and authors

The left-hand figure above[10], indicates that the modal period of change in DI coverage was in the aftermath of the 2008 Global Financial Crisis which lends weight to the argument that factors other than inflation also drive coverage change.

In the right-hand side figure above, we test for a correlation between inflation and the frequency of coverage changes.

[10] IADI (2021)

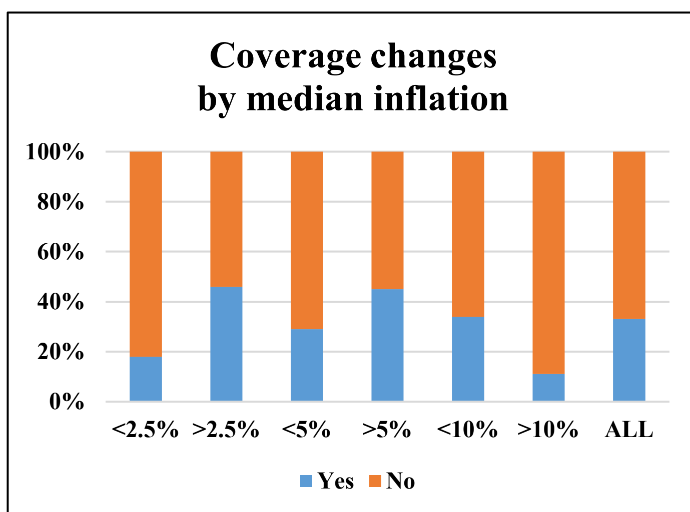
We compare the numbers of years since coverage was last changed with median inflation (15-year, annualised) at the jurisdiction level.[11] In lack of better data, we use the number of years since coverage change as an imperfect proxy for the frequency of coverage changes. A small negative association is observed, which offers some evidence to suggest that coverage levels are adjusted more frequently in jurisdictions with higher levels of inflation. The correlation coefficient of -0.6 (which is statistically significant[12]) can be interpreted such that each additional percentage point of inflation corresponds with a drop in the time that has elapsed since last coverage change of 0.6 years. However, the relationship does not appear to be particularly linear in nature, and thus measures of correlation and/or simple linear regressors should be viewed with caution.

Again grouping Annual Survey respondents along low, medium and high inflation lines using median inflation in the past 15 years, we find a higher prevalence of coverage changes in the first two groups.

TABLE THREE: COVERAGE CHANGES BY MEDIAN INFLATION

Median inflation (2007-21)	Coverage change (2015-2020)
<2.5%	18%
>2.5%	46%
<5%	29%
>5%	45%
<10%	34%
>10%	11%
All	*33%*

Source: IADI Annual Survey, IMF and authors



3.3 Conclusion

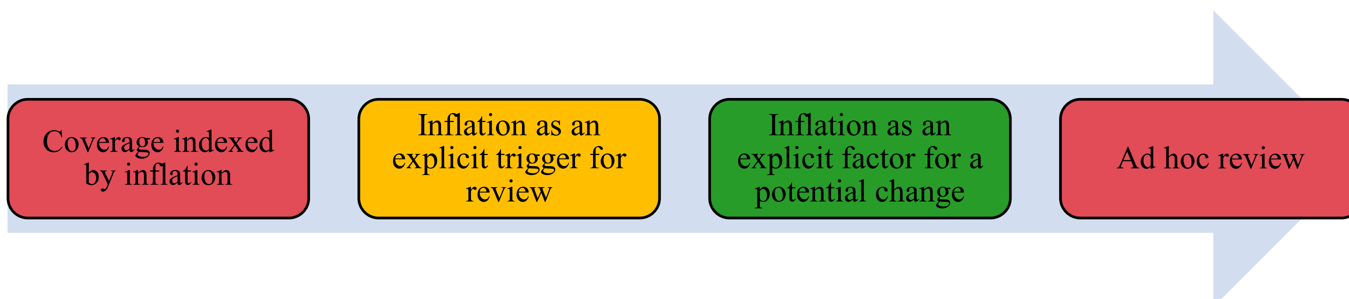
Limited data availability constrained our investigation into how inflation impacts the frequency of coverage review by deposit insurers in practice. We found that on a self-reported basis – irrespective of inflation – only half of deposit insurers "periodically" review the coverage level. Although this share has been growing over the past decade, evidence from a sub-sample suggests that – again, irrespective of inflation – periodic review of coverage levels by deposit insurers may regularly take place at intervals exceeding five years.

IADI guidance suggests that high and sustained inflation within a jurisdiction should lead to a review of coverage levels more frequently than every five years. We linked existing data on coverage reviews to historical inflation figures on an individual jurisdictional level and found no substantial evidence that high inflation correlates with more regular periodic reviews of coverage levels. As to changes of coverage levels – which are observable, in contrast to reviews – we find some early evidence to suggest that coverage levels are adjusted more frequently in jurisdictions with higher levels of inflation.

[11] This sample from IADI (2021) excludes Japan as a low-inflation jurisdiction which hasn't changed coverage limits for more than three decades.
[12] Statistically significant with 5% Type I error.

4 Decision-making in dealing with inflation and coverage levels

Existing guidance is silent on prescribing whether and how inflation should be taken into account in the process of reviewing coverage levels. This reflects the wide variety of approaches taken in many jurisdictions mirroring different experiences with inflation, its persistence and its impact. Even though available data is again scarce, we believe deposit insurers' practices in accounting for inflation in processes for coverage review can roughly be classified along the following lines. On a scale of decreasing formal inclusion of inflation in the coverage review process, we distinguish between four main methodological approaches.



Source: Authors' concept

4.1 Inflation Indexing

Indexing refers to a "limited coverage level which is determined or adjusted by the inflation rate or the change in another relevant price index of a jurisdiction."[13] This approach aims at maintaining coverage levels more or less constant in real terms.[14]

Indexing coverage levels to inflation is not a common practice by deposit insurers. Based on the 2021 IADI Annual Survey, we conclude that in only 6% of jurisdictions, deposit insurers presently index their coverage level and that the indexing is heavily influenced by inflation. These include Mexico, Uruguay, Tajikistan, Peru, El Salvador, Ecuador.[15]

Jurisdictions using an indexed coverage level seem to have historical experience with relatively high and often times persistent inflation challenges and use indexing in different ways.

- In a first group of jurisdictions, coverage levels in law are not expressed in nominal currency levels, but in an inflation-proof index unit. This applies to **Mexico** and **Uruguay**[16] that express coverage in UDI (investment units) and UI (index units) respectively. The value of these units in domestic currency (in which bank deposits are held) fluctuates mainly on the basis of inflation and is made available to the public on a daily basis. As a consequence, the coverage level fluctuates in nominal terms without the need for any action by public authorities or formal change in the coverage level. It is important to note that the index unit in which coverage levels are expressed are commonly used in Mexico and Uruguay (e.g. when issuing treasury bonds). **Tajikistan** has been following a similar approach and expressed coverage not in domestic currency (Somoni, TJS), but in a "calculation indicator". The value of this indicator in TJS is set yearly by the Ministry of Finance and is based amongst others on inflation projections. The calculation index (though not easy to use with the general public) is widely used by the authorities for taxation purposes, calculation of social benefits and allowances.[17]
- In a second group of jurisdictions, coverage levels are expressed in nominal fiat currency, but the law foresees for a mandatory regular indexing of these coverage levels to inflation. This applies to **Peru**, **El Salvador** and **Ecuador**[18]. The frequency of such indexing varies between three months (Peru) to two years (El Salvador).

[13] IADI Glossary
[14] On the concepts of nominal and real coverage, see Van Roosebeke and Defina (2022)
[15] Indexing must not necessarily be to inflation. The Palestine Deposit Insurance Corporation indexes coverage to GDP/capita and average total bank deposits, but this indexing practice is not prescribed by law.
[16] In Uruguay, indexed coverage applies only to deposits held in domestic currency. Coverage for deposits nominated in foreign currency is stated in nominal USD (currently USD 10.000) and is not adjusted for inflation in a comparable manner. About 75% of banking deposits in Uruguay are nominated in USD.
[17] Tajikistan is currently investigated the expression of coverage in TJS, in the absence of an automated inflation indexing.
[18] In Ecuador, as established by law (Organic Monetary and Financial Code), the amount of insured deposits is equal to twice the 'basic fraction' exempt from income tax, and not less than USD 32,000. The basic fraction deductible for each year is calculated according to the inflation index

Distinct from the previous group, and even though mandatory by law, this indexing does require action by a public authority. Generally, inflation-updated coverage levels will be confirmed by public authorities.

The vast majority of deposit insurers participating in the IADI Annual Survey (>90%) does not (semi-)automatically adapt coverage levels to inflation, be it by expressing coverage in inflation-proof indexes or by mandatory changes of coverage levels to inflation. Nevertheless, this group of deposit insurers is not homogenous in its consideration of inflation. In the remaining we differentiate between an inflation-based mandatory trigger for reviewing the coverage levels (section 4.2) and inflation as an explicit trigger for optional and fast-track change of inflation (section 4.3). Section 4.4 covers general ad hoc reviews of coverage levels that may also consider inflation.

4.2 Trigger for mandatory review

In a second approach, mandatory processes require the review of coverage levels and allow for an inflation-based increase. Such review may or may not lead to a change in the coverage level.

The most noteworthy adaptation of this approach is the Federal Deposit Insurance Corporation (FDIC) in the **United States**.

CASE STUDY: UNITED STATES

The Federal Deposit Insurance Reform Act of 2005 provides for regular and mandatory review of coverage levels on the basis of inflation. Legislation[1] in the United States prescribes a mandatory inflation-based review of the coverage level every five years by the FDIC Board of Directors and the National Credit Union Administration (NCUA) board. The official statistical measure on which such a potential adjustment should be based is identified (in this instance the Personal Consumption Expenditures Chain-Type Price Index, or any successor index).

Whether an inflation-based change in the coverage level should be made remains at the discretion of the FDIC and NCUA and does not require further confirmation by a legislative actor. However, legislation does limit the deposit insurer's discretion to make an inflation adjusted increase to the coverage amount by identifying three factors to be considered when making such a change. Such factors include that the FDIC and NCUA shall jointly consider the overall state of the Deposit Insurance Fund and the economic conditions affecting insured depository institutions; potential problems affecting insured depository institutions; or whether the increase will cause the reserve ratio of the fund to fall below 1.15 percent of estimated insured deposits.[2] The coverage level can be adjusted in increments of 10,000 USD, with smaller adjustments rounded down.

This hybrid approach appears to strike a balance between allowing for an inflation-only based adjustment of the coverage level by the deposit insurer itself, while at the same time limiting the deposit insurer's discretionary powers in doing so. The approach does not prevent other legislative adjustments to coverage. In fact, the Emergency Economic Stabilization Act of 2008 temporarily increased coverage from 100,000 USD to 250,000 USD in response to the global financial crisis. This level was made permanent in 2010 by the Dodd-Frank Wall Street Reform and Consumer Protection Act. The inflation adjustment provision, however, remains based on the 100,000 USD coverage level and the change in the price index since 2005. The FDIC has therefore (in 2020) determined that the inflation adjustment will not affect the coverage level for the foreseeable future because it will not take effect until the value of 100,000 USD, inflation adjusted since 2005, exceeds the current coverage level of 250,000 USD.[3]

[1] The Federal Deposit Insurance Reform Act of 2005, Pub L. 109-171, amendment to the Federal Deposit Insurance Act (FDI Act).
[2] Section 11(a)(1)(F) of the FDI Act, 12 U.S.C. § 1821(a)(1)(F); 12 CFR § 330.1(o).
[3] FDIC, Memo to the Board of Directors, Designated Reserve Ratio for 2021, November 17, 2020.

Similar to the first approach, this approach leads to an automatic and mandatory examination by the deposit insurer of the impact of inflation on coverage levels. The main difference with the first approach lays in the fact that in this second approach, this automatic aspect does not necessary imply a change of the coverage level. Whereas a review may be mandatory, an adjustment of the coverage level to inflation is not and remains at the discretion – although limited – of

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recorded up to November 30 of the current year. As of 2022, twice the basic fraction amounts to just over USD 22,000 which is well below the USD 32,000 coverage floor in operation. Note that USD has been the sole legal tender in Ecuador since 2001 (along with low-denomination centavo coins). In practice, the inflation-indexing has thus not been relevant as the index remained well below the coverage floor.

the deposit insurer. This discretion and the limits set to it make this approach somewhat more formal that indexing methods. Nevertheless, both approaches allow for decision-making on an administrative/executive level without lengthy legislative procedures.

4.3 Trigger for optional change

As a third approach in dealing with inflation, in some jurisdictions, inflation is explicitly mentioned in the law as a stand-alone factor that may trigger a change of the coverage level in a typically fast-track manner that avoids lengthy legislative processes. Such changes in the coverage level can generally be decided upon by administrative or executive bodies but may cover inflationary aspects only. Changes to the coverage level that go back to motives other than inflation adjustment typically require legislative action. In this third approach, the initiation of a review and the eventual change in coverage remains at the discretion of the responsible actor.

To the best of our knowledge, this methodology seems relevant especially in the **European Union (EU)** and **Switzerland**, where executive bodies can initiate (EU – see box below) or decide on (Switzerland) changes in coverage levels. In both cases, deposit insurers are to be consulted, but are not the decision makers. Neither Swiss law[19] nor EU-law impose any obligations for the executive to make use of this power. EU-law does however state that the EU-Commission can make use if these power "at least every five years".[20]

[19] Swiss Federal Banking Law (Bundesgesetz über Banken und Sparkassen), Art. 37a (2)
[20] DGSD Directive 2014/49/EU, Art. 6 (7)

CASE STUDY: EUROPEAN UNION

In the European Union, Directive 2014/49/EU on Deposit Guarantee Schemes (DGSD) sets out the legal framework for deposit insurance. The EU-Commission has the monopoly right to propose Directives in the policy field relevant to deposit insurance (the "internal market"). To become binding law, any EU-Commission proposal for a Directive must be adopted by both the European Parliament and the Council of the European Union. Both institutions will negotiate and modify the Commission's proposal prior to adoption, through an, at times, lengthy process. Directives are not directly applicable but must be transposed by all EU member states into binding national law by a deadline set out in the Directive. The current DGSD establishes a harmonised coverage level of EUR 100,000 across European Union member states.

There are two procedures for changing the DGSD (or other Directives).

- Under the "ordinary legislative procedure" described above, the Commission may formally propose changes to the DGSD to the European Parliament and the Council. Once adopted by both institutions, EU member states would need to transpose that amended Directive by changing domestic law. The deadline for such transposition is usually at least one year. It is exceptional for the time period between Commission proposal and reaching legal effect in domestic law to be less than two years given the complexity of this process.
- A second and faster procedure is for the European Parliament and the Council as co-legislators to explicitly, and in the text of the Directive, delegate powers to the Commission to change well-specified parts of the Directive in a fast-track manner by using "delegated acts". For reasons of democratic legitimacy, these changes can only cover non-essential elements of the legal text. Proposals for delegated acts by the EU-Commission require implicit approval by both European Parliament and Council – any of both institutions can object to a proposed delegated act, typically within a period of three months. Also, at any time, both European Parliament and Council can revoke a power that has been delegated to the EU Commission in a Directive or Regulation.

Within Directive 2014/49/EU, the European Parliament and the Council as co-legislators have made use of this latter possibility and have delegated powers to the EU Commission to adapt the EUR 100,000 coverage level to inflation.

The Commission is empowered to adjust the coverage level "at least every five years, in accordance with inflation in the Union on the basis of changes in the harmonised index of consumer prices published by the Commission since the previous adjustment." It is important to note that the Commission is not forced to make use of this power. In fact, since adoption of the Directive in 2014, it has not made use of this power. Also, most likely to meet the criterium of delegation of powers on "non-essential" elements only, the Commission's powers to change the coverage level are limited to inflationary aspects only. Any change of the coverage level based on other considerations would require a formal – and lengthier – procedure through the ordinary legislative procedure.

General reviews of the coverage level that are not only motivated by inflation are explicitly mentioned in the Directive. The legal text clearly and in accordance with the Core Principles says that the coverage level "shall be reviewed periodically by the Commission and at least once every five years". Considering "particular developments in the banking sector and the economic and monetary situation in the Union" the Commission can propose a formal change of the coverage level to European parliament and Council. The first review shall not take place before 3 July 2020 unless unforeseen events necessitate an earlier review.

Between February and May 2020, the EU Commission conducted a comprehensive public consultation on the review of bank crisis management and deposit insurance framework. This included the issue of the coverage offered by the DGSD. As of 2022, a formal legislative proposal for change has not been made by the Commission.

4.4 Ad hoc or periodic review

As a fourth and catch-all approach, inflation can trigger or be a factor in a periodic or ad hoc review of coverage levels. Jurisdictions are likely to consider inflation and accumulated depreciation in real terms of nominal coverage levels when reviewing coverage.

Such reviews are generally conducted within the context of a broader analysis that may incorporate many issues such as macroeconomic indicators (including inflation), banking sector specific trends, political and regulatory considerations and/or other related policy objectives. Whereas in some jurisdictions, changes require legislative approval, in others, the deposit insurer[21] or other administrative/executive bodies can change the coverage levels. [22]

Conclusive data is not available on the prevalence with which inflation is an explicit or mandatory factor contributing to (or has motivated at all) ad hoc or periodic reviews. However, for a number of jurisdictions, previous IADI research uncovered some evidence to suggest that keeping real coverage levels constant may have been guiding decision-makers when changing nominal coverage levels.[23]

This approach is generally relevant to all deposit insurers. Core Principle 8, Essential Criteria 5 calls for periodic review (see above), which should lead to a change in coverage levels if necessary, to ensure the deposit insurer continues to meet public policy objectives. Even within a system of indexing, such review is necessary to consider factors other than inflation that may impact deposit protection and financial stability.

4.5 Summary

Deposit insurance coverage is indexed to inflation in only a few jurisdictions. We identified six jurisdictions to which this is relevant. Within this group, some jurisdictions have established an automated adjustment to inflation by expressing in law, coverage levels via an inflation-proof index (Mexico, Uruguay, Tajikistan). Coverage level as expressed in nominal currency terms hence adapt without the need for any further action. The adjustment of the index to inflation may take place more or less frequently. In a second group of jurisdictions, coverage is indexed to inflation by law, but this requires a decision by an administrative body (Peru, El Salvador, Ecuador). In both groups, the adjustment for inflation is mandatory.[24] Given the need for action to change coverage levels in the second group, we argue discretion for the deposit insurer or decision maker in this group is slightly higher.

Most jurisdictions (>90%) do not index coverage levels to inflation. These jurisdictions can adjust coverage levels to inflation – if necessary – through their respective legal procedures for the review of coverage levels. These procedures may include powers for the deposit insurer to adjust coverage levels (with or without the need for consent by another authority) and/or may require lengthy legislative changes by parliaments involved. In any case, these procedures allow for a high degree of discretion and inflation will be one of many factors taken into consideration when changing coverage levels. We have no conclusive data on the explicit role inflation plays in this process.

A number of jurisdictions allow for fast-track changes of coverage levels on the explicit basis of inflation only. In one jurisdiction (United States), it is mandatory for the deposit insurer to review the need for such change on a regular basis and to change coverage levels if found necessary. In the EU and Switzerland, executive bodies can change coverage levels on the basis of inflation, if they deem appropriate. The options in these jurisdictions seem designed to allow for fast-track changes to coverage levels in addition to lengthy legal procedures for changing coverage levels. These fast-track powers are limited in scope to inflationary adjustments and thus differ from the wide-scoping powers granted to some deposit insurers to change coverage levels, which may or may not include inflation indexing (e.g. in the Philippines).

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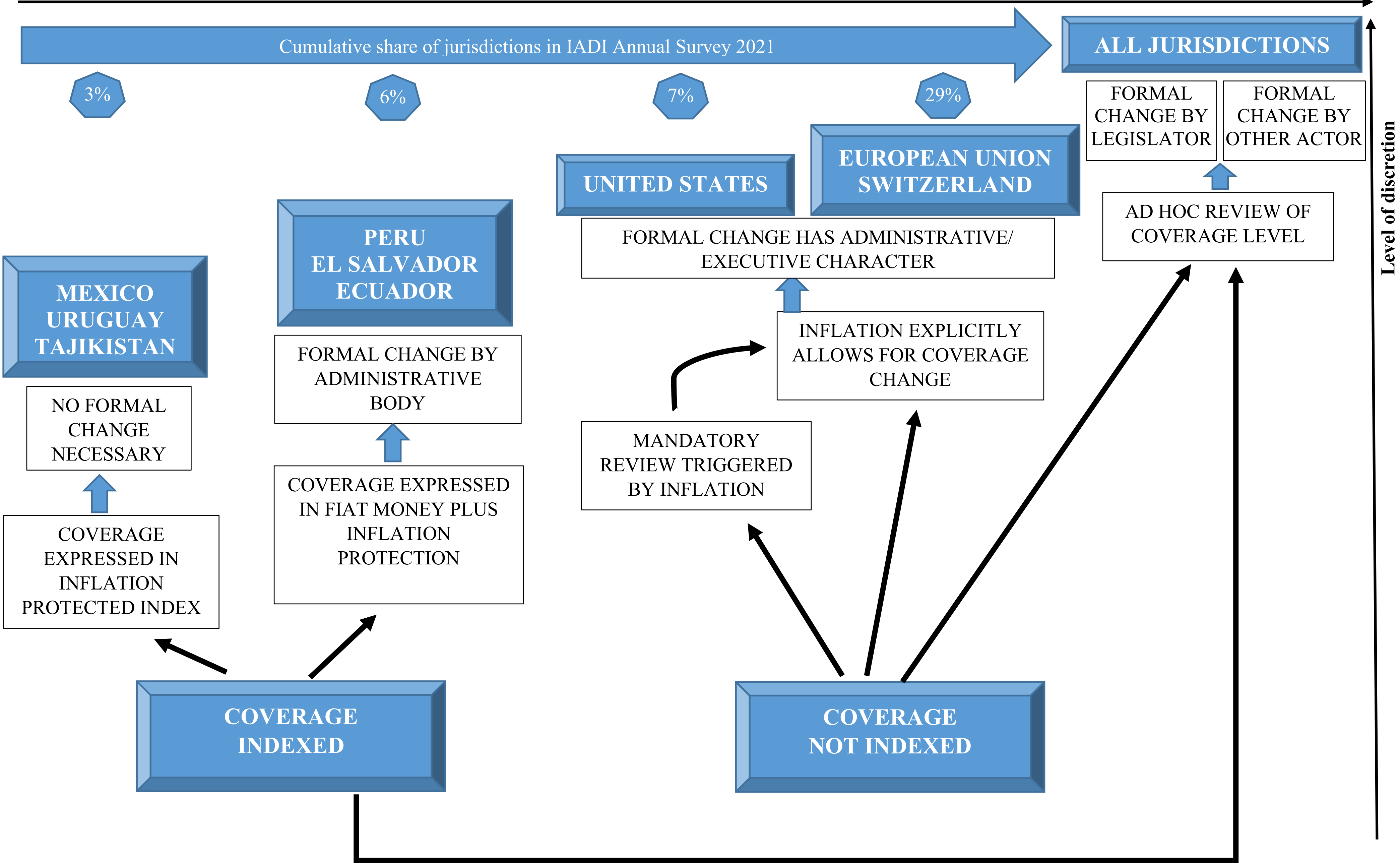
[21] As an example, in Nigeria, the Board of the Nigeria Deposit Insurance Corporation may from time to time adjust upwards the maximum coverage amount as defined is legislation. This power is not limited to inflationary adjustments.

[22] The Philippines are an example of a jurisdiction combining various elements of these approaches. It entails a mandatory review of coverage levels every three years and allows for fast-track changes through delegated authority to the Board of the Philippine Deposit Insurance Corporation (PDIC). The Board may increase the coverage to an amount indexed to inflation, but also in consideration of other economic indicators as may be deemed appropriate.

[23] Van Roosebeke and Defina (2022)

[24] In Ecuador: only once a coverage floor is surpassed.



Source: Authors' concept

5 Points of Consideration

5.1 Data availability

The ability to conduct periodic reviews of coverage levels presupposes the availability of data to deposit insurers regarding coverage ratios and distribution of deposits within the applicable jurisdiction. This is all the more valid in times of high inflation, as inflationary pressures may impact the growth rate of deposits, which may differ considerably across income groups.[25]

The Financial Stability Board indicated in 2012 that "relatively few [deposit insurers in FSB member jurisdictions] regularly collect and assess the statistics necessary for monitoring the adequacy of coverage levels". [26] This decade old finding is in part supported by observations from IADI Annual Survey data. The 2021 (and previous) data suggests 70% of deposit insurers does not have data available on the coverage ratio per account and only half of deposit insurers has data available on the coverage ratio per depositor. The reasons therefore may be multiple –constraints of legal, technical, or resource-oriented nature – but if confirmed, this lack of data hampers the ability for periodic reviews of coverage levels.

5.2 Inflation indexing

5.2.1 Indexing and public awareness

Frequent changes in coverage levels based on inflation indexing may impact negatively on public awareness. Depositors may be uncertain about the coverage level at a given point in time and this may negatively impact on financial stability.

Likely caused by the low number of indexing jurisdictions, research on public awareness experience upon indexing coverage levels is very scarce. We found negligible commentary within IMF/World Bank Financial Sector Assessment Program reports or Article IV Consultations on the issue of DI coverage adjustments responding to inflation.

Garcia (2000) argues that "*although some countries index the coverage limit for inflation, good practice argues against indexing, as this leads to annual changes that would be difficult for depositors to remember. Being able to keep track of the coverage limit is essential for enabling the public to protect its interests. The ideal situation is one where a country has low inflation, so that it can keep the limit constant for a relatively long period of time until the increasing value of real GDP warrants an increase. In this way, the public can know the coverage limit with certainty and the limit remains appropriate to the number and value of deposits in the economy. When adjustments are necessary, however, it may be better to delay changing the coverage limit, until an easy-to-remember number becomes appropriate.*"

However, this lacks a differentiated view on the two methodologies for indexing coverage to inflation that have been identified above. Expressing coverage levels in nominal currencies inevitably leads to more or less frequent changes in coverage levels when applying an inflation index. This may be challenging for public awareness and make additional communication efforts on the side of the deposit insurer necessary. The situation may be different when expressing coverage levels in an inflation protected index unit that is widely used and accepted by both the general public and the government[27] and that may serve as a unit of account, in a way that is similar to fiat money. This situation may apply to only a very small number of jurisdictions but may reduce the potential for confusion in actual coverage levels.

5.2.2 Moral hazard

Indexing coverage levels to inflation may increase the moral hazard risk inherent to deposit insurance and other forms of guarantees and may reduce market discipline unless mitigated by other measures. In instances where a large proportion of depositors hold account balances well below the coverage level, an incremental increase in coverage will have minimal impact and negligible increases to moral hazard. In other cases, rising coverage levels may lead to large deposit accounts increasingly becoming fully covered by deposit insurance. Such depositors are likely to be better informed than depositors with smaller balances. They may take advantage of the full coverage by placing their deposits with riskier banks offering a higher yield. In sum, this reduces market monitoring and market discipline in the absence of mitigants such as additional supervisory oversight, more prompt intervention in the affairs of troubled institutions

[25] During periods of above-trend inflation, deposit growth is expected to be lower in low-income groups, given higher levels of marginal consumption in this group.
[26] FSB (2012)
[27] As an example, in Uruguay and Mexico, the government issues bonds in the index unit in which deposit insurance coverage is expressed.

and changes in differential premia to avoid risks to financial stability.

5.2.3 Financial risks to the deposit insurer

As with any increase in the coverage level, inflation-induced increases in the nominal coverage limit add to the deposit insurer's liabilities. This may negatively impact on the adequacy of a deposit insurer's fund size in meeting future liabilities, if the additional exposure by the deposit insurer is not offset by increases in premium income.[28] This scenario may be particularly applicable during periods of sudden and high inflation, and this environment is likely to correlate with reduced stability in the financial sector and higher probabilities of bank default(s).

Indexing coverage to inflation creates additional challenges. First, indexing coverage levels tends to take place in an automated way, with little possibility for the deposit insurer to demonstrate discretion and potentially prevent an increase in coverage levels (see graph above). This complicates due consideration of the deposit insurer's existing financial condition before increasing coverage. Second, indexing tends to take place at frequent intervals to avoid depreciation of coverage levels. Such a scenario may require an equally frequent change in premium calculation.[29] Third, if applied consistently, in periods of deflation, indexed coverage levels should decrease. This may however be difficult to implement as the decrease may be misinterpreted as lowering depositor protection.

6 Conclusion and outlook

In many parts of the world, central banks face a long-forgotten and difficult task in bringing down inflation rates without risking a sharp economic downturn. The fragile growth outlook and a number of compromising factors, including high debt levels and political risks, make this this "soft landing" with a controlled reduction in inflation a very challenging task.

This paper serves to offer insights in how IADI as global standard-setter for deposit insurers has addressed inflation considerations; and how its Members have incorporated such considerations. Given the prevalence of relatively low inflation over the past two decades in many jurisdictions, the topic has not generally been viewed as being a high priority for most deposit insurers. We hope this paper adds to the knowledge base. Depending on the jurisdiction and economy at hand, inflation may have diverse and different causes and may be dealt with by monetary authorities and governments in different ways. For this reason, any consideration on how a deposit insurer can appropriately deal with inflationary pressures requires a jurisdiction-specific analysis.

Future research could aim at tracking the policy responses to inflation chosen by deposit insurers globally and further improving insights on deposit insurers' data availability regarding coverage ratios. Also, governance models related to decision-making in changing coverage levels may deserve further attention. A number of diverging models seem to be in place that attempt to balance the need for swift action – whether inflation-based or not – in changing coverage levels with the need for sufficient legitimacy by the deciding actor.

Going beyond the perspective of setting appropriate coverage, research into further channels through which inflation impacts deposit insurers is promising. This includes broader financial stability and the likelihood of bank defaults, the impact of inflation on bank assets and deposit insurers' net recoveries, and the use and coverage of foreign currency deposits.

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[28] With rising nominal coverage levels, premium collection based on covered deposits can also be expected to rise. In addition, deposit insurers may opt to invest resources in securities linked to inflation. This may also help managing financial risks of inflation.

[29] In Mexico, IPAB calculates premiums on a monthly basis using the average daily balance of each bank's liabilities, as expressed in Mexican Pesos.

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