Applying IFRS 9 to Central Banks Foreign Reserves

January 20, 2016

Abstract

Effective January 1, 2018, IFRS 9 Financial Instruments will replace IAS 39 Financial Instruments: Recognition and Measurement (IAS 39). Unlike most publications on IFRS 9, this paper focuses primarily on the application of the new standard on central banks’ foreign reserve assets, which increasingly constitute a substantial part of central banks’ balance sheet.

Based on IFRS 9 implementation assessment projects with several central banks, the World Bank RAMP\(^1\) Accounting team\(^2\) identified six factors that can help central banks determine appropriate business model for foreign reserve assets. Empirically, the result of applying the six factors has indicated that central banks’ reserve portfolios often display elements of more than one business model; hence management judgment coupled with a well-articulated accounting policy paper will be critical when implementing IFRS 9. Under most central banks reserves management frameworks, performing the solely payments of principal and interest (SPPI) test should be a relatively straightforward exercise, and the practical expedient option under the new impairment provisions should also apply.

**Keywords:** Foreign reserves, International Financial Reporting Standard 9 Financial Instruments (IFRS 9), Central banks, Business model, Held-to-collect, Collecting-and-selling, Solely payments of principal and interest, Fair value through profit and loss, Amortized cost, Fair value through other comprehensive income, Impairment, Expected Credit Loss model, Practical expedient option, Explicit probability of default approach

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\(^1\) Reserve Advisory and Management Program (RAMP) is a capacity building service aimed towards central banks and other official sector asset management entities. For more information, please go to: [http://treasury.worldbank.org/sip/htm/central_bank.html](http://treasury.worldbank.org/sip/htm/central_bank.html)

\(^2\) This paper is a product of a team effort, with Lott Chidawaya as the key author, numerous insights and guidance from Amit Bajaj, Wei Chen, Kelley Dai, Yunjung Ha, Ying Li, Diann Martin, Shaun Ng and Robert Anthony Surtees Shotter. The RAMP Accounting Team is indebted to Salome Skhirtladze (Head of Finance and Accounting Department, National Bank of Georgia) and Naidene Ford-Hoon (Chief Financial Officer, Reserve Bank of South Africa) for their generous collaboration. RAMP Accounting Team is also grateful to World Bank’s Financial Advisory & Banking (FAB) team; Quantitative Solutions, SAA & Analytics (QSA) team and Kenneth Sullivan for extensively reviewing the paper.
Executive Summary

Central banks are public policy agencies designed to maintain monetary and financial stability, set regulatory standards for the financial system, establish financial infrastructure, provide other public good functions, and monitor policy operations (Archer 2009). A part of the policy operations of central banks is the foreign reserves management function, through which central banks hold official foreign exchange reserves (foreign reserves) to meet unique purposes, such as to support foreign exchange rate management, meet a country’s foreign financial obligations, and maintain a reserve for emergencies. In the past decade, many central banks around the world have increased the foreign reserve assets on their balance sheets (Morahan and Mulder 2013). While the trend of increasing reserve size continues, over the years the appropriateness of IFRS standards as the financial reporting framework for central banks has been discussed and explored in the literature (for example, Schwarz et al. 2014). Other publications (for example, Archer and Moser-Boehm 2013; Sullivan 2003; Sullivan 2005) have commented on the potential hazards of distributing resources based solely on accounting profit. While recognizing the credibility and transparency benefits of complying with internationally recognized financial reporting standards, this paper intentionally does not discuss these topics.

Instead, the paper provides guidance on how central banks that have adopted IFRS should classify and measure foreign reserve assets as well as implement the impairment model. The translation of transactions and balances from foreign currencies to functional and presentation currencies remains under the domain of International Accounting Standard 21. The paper also intentionally does not discuss the implications of IFRS 9 on central banks’ domestic assets, which arguably deserve at least equal attention and effort. IFRS 9, as compared with International Accounting Standard 39 (IAS 39), has changed the requirements for the classification and measurement of financial assets, enhanced the impairment model, and simplified hedge accounting. The standard applies one classification approach for all types of financial assets within its scope based on two criteria: the business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. The International Accounting Standards Board (IASB) clarified that it is more efficient to consider the business model criterion first, followed by the contractual cash flow characteristics criterion.

A business model refers to the way an entity (for the purpose of this discussion, entities denotes central banks) manages its financial assets in order to generate cash flows. A business model is a matter of fact rather than an assertion and is generally observable through activities that an entity undertakes to achieve its business objectives. The standard envisages two distinct business models within which financial assets can be managed—held-to-collect and collecting-and-selling—and a third residual category. The World Bank Reserves Advisory and Management Program (RAMP) accounting team worked with several central banks as part of its RAMP engagement in IFRS 9 implementation assessment projects on foreign reserves. As a result of the in-depth practical experience, the RAMP Accounting team identified six factors which are implicitly in the standard, which can help central banks determine the appropriate business model for holding foreign reserve assets:

1. Objectives for each foreign reserve tranche
2. Frequency, value, and timing of sales in prior periods; the reasons for those sales; and expectations about future sales activity
3. Basis of management decision making: whether or not central bank management focuses primarily on fair value information to make decisions
4. Risk parameters under which portfolio reserve assets are managed to meet the objectives
5. Performance evaluation (including compensation): how central bank portfolio managers’
   performance is evaluated and how it relates to compensation
6. Relative significance of the various sources of income (for example, interest income relative to
   fair value gains and losses) as one objective determinant to assess how integral contractual cash
   flows are vis-à-vis fair value gains or losses

The result of applying the above six factors has shown that central banks’ reserve tranches very often
display elements of more than one business model. Consequently, the most appropriate business model
for a particular central bank usually requires management’s judgment. Similar portfolios of foreign
reserve assets could be classified and measured differently according to each central bank’s unique
management objectives, trading strategies, and implementation styles.

The second criterion, contractual cash flow characteristics, is applied at individual instrument level to
verify whether contractual cash flows from the foreign reserves assets are solely payments of principal
and interest (SPPI). Performing the SPPI assessment is not a bright-line test and also requires professional
judgment. However, since many central banks’ foreign reserve assets consist of sovereign debt
instruments, performing the SPPI test may be a relatively straightforward exercise. Financial assets that
meet both the business model and SPPI tests can be classified and measured either at amortized cost or at
fair value through other comprehensive income (FVOCI). All other financial assets that do not meet the
business model or SPPI tests are classified and measured in the residual category, fair value through profit
and loss (FVTPL).

The standard also introduced a single impairment model for all financial assets measured at amortized
cost or FVOCI. The new IFRS 9 expected credit loss (ECL) model is a forward-looking approach that is
an enhancement from the current IAS 39 incurred loss model that produces different results depending on
asset classification. For high-quality assets typically characteristic of foreign reserve holdings, central
bank management can elect the practical expedient option, which reduces implementation challenges for
assets that are deemed to have low credit risk. Empirically, implementing the ECL model using the
explicit probability of default approach assuming the practical expedient option is elected may well result
in negligible expected credit loss provisions.

The Purpose of Central Banks’ Foreign Reserves

In the past decade, many central banks around the world have increased the foreign reserve assets on their
balance sheets (Morahan and Mulder 2013). Central banks hold foreign reserves in support of critical and
unique objectives of national importance. These include the following:

- Supporting and maintaining confidence in the policies for monetary and exchange rate
  management, including the capacity to intervene in support of the national or union currency
- Limiting external vulnerability by maintaining foreign currency liquidity to absorb shocks during
times of crisis or when access to borrowing is curtailed, and, in doing so,
  o provide a level of confidence to markets that a country can meet its current and future
    external obligations,
  o demonstrate the backing of domestic currency by external assets,
  o assist the government in meeting its foreign exchange needs and external debt obligations,
  and
  o maintain a reserve for national disasters or emergencies
In determining what foreign reserve assets are needed for which purpose, central banks perform elaborate reserve-management processes by segregating assets into subportfolios, each with specific objectives and guidelines. Most central banks create, through a process called tranching, portfolios of foreign reserve assets based on time horizons when commitments (for example, import coverage, debt payments) are due and payable. For example, a working capital tranche is usually set to meet financial needs falling within the short term, say, up to 3 months, and a liquidity tranche is usually created to meet financial needs within up to 12 months and to fund the working capital tranche. Another subportfolio, an investment tranche, is usually set up for longer term financial needs and to generate moderate returns.

Central banks use traditional portfolio management frameworks such as the strategic asset allocation (SAA) approach to manage foreign reserve asset portfolios. After determining appropriate monetary amounts for each tranche and taking into consideration macroeconomic factors, the SAA is the investment policy statement that defines currency and foreign reserve assets composition, risk budget, acceptable credit risk and concentration limits, acceptable duration of the portfolio assets, and the appropriate portfolio benchmarks. Tranche portfolios or subportfolios may be managed and performance evaluated against benchmarks and conservative investment guidelines. Since the goal of central banks is to maintain financial stability, usually these constraints ensure that foreign reserve assets are managed within a capital preservation framework.

Overview of IFRS 9

The final IFRS 9 was issued on July 24, 2014, completing the three phases that the IASB embarked on to replace IAS 39. Many users of financial statements and other interested parties had deemed IAS 39 as too prescriptive and difficult to understand, apply, and interpret. IFRS 9 has a mandatory implementation date effective for annual periods beginning on or after January 1, 2018, with early adoption permitted.6 The new standard introduced changes in the way financial instruments are classified and measured, a new impairment model, and a new approach to hedge accounting that better aligns with risk management practices. Hedge accounting is outside the scope of this paper.

Financial Assets Classification and Measurement

IFRS 9 applies one classification approach for all types of financial assets based on two criteria:

1. The business model for managing the financial assets
2. The contractual cash flow characteristics of the financial assets

A business model refers to the way an entity (for the purpose of this discussion, entities denotes central banks) manages its financial assets in order to generate cash flows. A business model is a matter of fact rather than an assertion and is generally observable through activities that an entity undertakes to achieve its business objectives. The standard envisages two distinct business models within which financial assets can be managed—held-to-collect and collecting-and-selling—and a third residual category. Under both the held-to-collect and collecting-and-selling models, contractual cash flows from the financial assets must be SPPI.

Financial instruments that consist of SPPI-type cash flows are usually simple-debt financial assets, including money market instruments. In this context, interest is deemed to be compensation for the time value of money; credit risk, and other basic lending risks (for example, liquidity risk); costs (for example, administrative costs); and profit margin, consistent with a basic lending arrangement. After considering the classification criteria and performing the SPPI tests, financial assets that are held-to-collect cash flows and whose contractual cash flows are SPPI will be classified and measured at amortized cost. On the other
hand, financial assets that are held for *collecting-and-selling* when generating cash flows and where contractual cash flows are SPPI will be classified and measured at FVOCI. Financial assets that violate any of the two classification criteria will be classified and measured in the FVTPL residual category. Derivatives and equity investments do not meet the SPPI test, and are classified and measured at FVTPL.

Despite the classification criteria just discussed, entities may, at initial recognition when they become party to the contractual provisions of debt financial assets, irrevocably designate such debt financial assets as measured at FVTPL if doing so eliminates or significantly reduces a measurement or recognition inconsistency that is commonly referred to as an *accounting mismatch*. In addition, entities that hold equity instruments for non-contractual benefits, rather than primarily for increases in the value of the investment, may make an irrevocable election at inception on an instrument-by-instrument basis to classify and measure such equity investments at FVOCI. Unrealized gains or losses for both debt and equity instruments measured at FVOCI are reported as *other comprehensive income*. Realized gains or losses for debt instruments are subsequently reclassified to profit or loss, whereas realized gains or losses for equity instruments are not reclassified to profit or loss. Instead, cumulative realized gains or losses for equity instruments may be transferred within equity accounts.

**A Brief Overview of the New Impairment Model**

IFRS 9 introduced one impairment model for all financial assets that are classified and measured at amortized cost or FVOCI. The new impairment approach is a forward-looking ECL model that is an improvement over the current incurred-loss model under IAS 39. Under the incurred-loss model, entities may consider only losses that arise from past events and current conditions, whereas under the ECL model, the effects of possible future credit loss events are also considered. Consequently, IFRS 9 broadens the information entities must consider when determining expectations of credit losses.

This information must be reasonable, supportable, and available without undue cost or effort and ordinarily would include historical, current, and forecast information. The standard is not prescriptive on any particular measurement methods; entities will use sources that they generally use in their normal business undertakings. The new ECL model for impairment ranks among the fundamental changes that IFRS 9 has introduced. To enhance a robust and consistent implementation, the IASB created a discussion forum called the IFRS Transition Resource Group for Impairment of Financial Instruments (ITG),7 mandated with soliciting, discussing, and opining on impairment implementation issues arising from ECL model requirements.

In a nutshell, the ECL model consists of three stages for impairment based on changes in credit quality since initial recognition. They are shown in figure ES1.
Entities will be required to calculate either 12-month or lifetime expected credit losses for each financial asset, depending on what impairment stage the asset falls in. When measuring expected credit losses, the following non-exhaustive list could be considered:

- The probability-weighted outcome that reflects the possibility that a credit loss occurs and the possibility that no credit loss occurs
- The time value of money, by discounting expected credit losses to the reporting date
- Reasonable, supportable, and available information without undue cost or effort

It is important to note that lifetime expected credit losses (stages 2 and 3) are recognized only after a significant increase in credit risk. The standard elaborates on this point by stating that when credit is first extended, the initial creditworthiness of the borrower and initial expectations of credit losses are taken into account in determining acceptable pricing and other terms and conditions. True economic losses arise when expected credit losses exceed initial expectations (that is, when the lender is not receiving compensation for the level of credit risk to which it is now exposed).

Financial instruments that have low credit risk, such as investment grade rated assets (although an external rating grade is not a prerequisite for a financial instrument to be considered low credit risk), are generally assessed for 12-month expected credit losses under stage 1 of the ECL model. For operational simplification convenience, entities can elect the practical expedient option, through which entities can always assume that credit risk has not increased significantly since initial recognition for assets that are deemed to have low credit risk. The practical expedient option is covered in more detail under the subsection “ECL Impairment Approach to Foreign Reserves”.

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### Figure ES.1 The Expected Credit Loss (ECL) Model’s Three Stages for Impairment

<table>
<thead>
<tr>
<th>Stage 1</th>
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</thead>
<tbody>
<tr>
<td>As soon as financial assets are originated or purchased, 12-month expected credit losses are recognized. After electing the “practical expedient” option, investment grade assets with low credit risk are also assessed within this stage. Interest revenue is calculated on the gross carrying amount.</td>
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<th>Stage 2</th>
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<tbody>
<tr>
<td>When credit risk increases significantly and the resulting credit risk is not considered to be low credit risk, lifetime expected credit losses are recognized. Interest revenue is calculated on the gross carrying amount.</td>
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<tr>
<th>Stage 3</th>
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<tbody>
<tr>
<td>When credit risk increases to the point that financial assets are considered credit impaired, financial assets in stage 3 are individually assessed and impairment losses recognized. Interest revenue is calculated on the net carrying amount (i.e., gross carrying amount adjusted for impairment losses).</td>
</tr>
</tbody>
</table>
Empirical Results of IFRS 9 Implementation Projects

The ideas discussed in this section were gathered from an extensive review of the IFRS 9 standard, *Basis for Conclusions on IFRS 9,* as well as information shared in the various webcasts hosted by staff of the IFRS Foundation. In this section, any reference simply to a paragraph number refers to the content in IFRS 9. Paragraph references from the “Application Guidance” (appendix B of IFRS 9) are prefixed with the letter “B”; and paragraph references from the *Basis for Conclusions on IFRS 9* will be prefixed with “BC”. Most important, the World Bank RAMP accounting team worked closely with several central banks as part of the RAMP engagement and conducted in-depth IFRS 9 implementation analyses in order to fully break down the issues and nuances specifically associated with foreign reserves management within a central bank’s context.

When assessing the two criteria for determining how financial assets are classified and measured, the IASB clarified in BC4.14 that it is more efficient for entities to consider the business model first, followed by the contractual cash flow characteristics of financial assets. Consequently, the discussion below follows the sequence in IFRS 9, starting with both aspects of the classification and measurement approach (business model followed by contractual cash flow characteristics considerations) and the ECL impairment approach. As previously indicated, hedge accounting is outside the scope of this paper.

Classification and Measurement: What Is the Business Model?

Paragraph 4.1.1(a) requires entities to classify financial assets on the basis of the entity’s business model for managing the financial assets, unless management has elected as an option, in accordance with paragraph 4.1.5, the accounting policy to designate financial assets at FVTPL. Based on the business model as determined by the entity’s key management personnel, central banks must assess whether financial assets meet one of the following conditions:

- Either in accordance with paragraph 4.1.2(a) the financial assets are held within a business model whose objective is to hold financial assets in order to collect contractual cash flows, or
- In accordance with paragraph 4.1.2A (a) the financial assets are held within a business model whose objective is achieved by both collecting contractual cash flows and selling financial assets.

Table ES.1, though not exhaustive, summarizes some of the factors that central banks need to consider while assessing the business model within which foreign reserve assets are held in accordance with IFRS 9.

<table>
<thead>
<tr>
<th>Table ES.1 Factors to Consider When Assessing the Business Model to Hold Foreign Reserves</th>
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<tr>
<td><strong>Factors</strong></td>
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<tr>
<td>Objectives for each foreign reserve tranche</td>
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<td>Factors</td>
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<tr>
<td>------------------------------------------------------------------------</td>
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<tr>
<td>Frequency, value, and timing of sales in prior periods; the reasons for those sales; and expectations about future sales activity</td>
</tr>
<tr>
<td>Basis of management decision making: whether or not central bank management focuses primarily on fair value information to make decisions</td>
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<tr>
<td>Risk parameters under which portfolio reserve assets are managed to meet the objectives</td>
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<tr>
<td>Performance evaluation (including compensation): how central bank portfolio managers’ performance is evaluated and how it relates to compensation</td>
</tr>
</tbody>
</table>
### Factors

**Relative significance of the various sources of income (for example, interest income relative to fair value gains and losses) as one objective determinant to assess how integral contractual cash flows are vis-à-vis fair value gains or losses**

<table>
<thead>
<tr>
<th>IFRS 9</th>
<th>Possible focus points</th>
</tr>
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<tbody>
<tr>
<td>B4.1.5</td>
<td>- Central banks should perform quantitative assessments to determine whether interest income forms a significant part relative to fair value gains and losses of the tranche’s income. If yes, then there seems to be evidence to argue that the collection of contractual cash flows is more integral to achieving the business model’s objective (amortized cost or FVOCI). If, on the other hand, the fair value gains and losses are significant relative to interest income, then collection of contractual cash flows may be more incidental and suggest that a FVTPL classification is more appropriate.</td>
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**Classification and Measurement: Are Cash Flows SPPI?**

Paragraph 4.1.1(b) requires central banks to classify financial assets on the basis of the contractual cash flow characteristics of the financial assets, unless management has elected as an option, in accordance with paragraph 4.1.5, the accounting policy to designate financial assets at FVTPL. According to the standard as stipulated in both paragraphs 4.1.2(b) and 4.1.2A (b), central banks must assess whether the contractual terms of financial assets give rise on specified dates to cash flows that are SPPI on the principal amount outstanding.

Contractual cash flows that are SPPI on the principal amount outstanding are consistent with a basic lending arrangement. Contractual terms that introduce exposure to risks or volatility in the contractual cash flows that are unrelated to a basic lending arrangement, such as exposure to changes in equity prices or commodity prices, are inconsistent with SPPI cash flows. For contractual terms that change the timing or amount of cash flows (for example, prepayment or term extension provisions), central banks must assess either quantitatively or qualitatively the contractual cash flows that could arise both before and after the change in contractual cash flows. In cases where these changes in contractual cash flows are significantly different from each other, financial assets fail to meet the SPPI test. Management must use professional judgment to determine the significant threshold. Cash flow characteristics that do not represent SPPI but have a *de minimis* effect on the contractual cash flows of the asset can be safely disregarded.

To assess whether the effect is *de minimis*, central banks must consider the possible effect of the contractual cash flow characteristic in each reporting period and cumulatively over the life of financial assets. However, if contractual cash flow characteristics could have an effect on the contractual cash flows that is more than *de minimis*, but that cash flow characteristic is “not genuine,” it does not affect the classification of a financial asset. According to the standard, a cash flow characteristic is not genuine if it affects the instrument’s contractual cash flows only on the occurrence of an event that is extremely rare, highly abnormal, and very unlikely to occur. Again, central bank management must use professional judgment to determine whether contractual terms could be considered not genuine and therefore safely disregarded. Figure ES.2 summarizes the process for determining whether cash flows are SPPI.
To summarize, IFRS 9 applies one classification approach for all types of financial assets within its scope, based on two criteria: the business model for managing the financial assets and the contractual cash flow characteristics of the financial assets. However, the criteria are not straightforward and require professional judgment. Similar foreign reserve assets could be classified and measured differently among central banks and even within the same central bank. For example, certain foreign reserve assets that meet the SPPI condition could be held in, say, the working capital tranches in order to collect contractual cash flows to meet short-term liquidity needs. Similar foreign reserve assets could also be held in another portfolio whose main purpose is to meet potential liquidity needs necessary to fulfil central banks’ multiple functions. In the meantime, central banks may hold these assets to collect contractual cash flows and to sell in part to increase financial returns under certain strict parameters. Unless if FVTPL was elected, in the former case for working capital tranches, the assets would be classified and measured at amortized cost and in the latter case, these assets would be classified and measured at FVOCI.

Similar assets can also be held in a portfolio whose main objective is to actively trade in order to maximize returns to offset against the costs of accumulating reserves for central banks. Under this scenario, the assets would be classified and measured at FVTPL. Also, even though the business model of a certain tranche is determined to be collecting-and-selling, if any financial assets in that tranche fail SPPI, such assets would be classified and measured at FVTPL instead of FVOCI. For instance, if a liquidity tranche whose business model is collecting-and-selling holds either financial assets with leveraged cash flows such as derivatives (for example, futures and foreign exchange forwards) or
financial assets with complex features that fail SPPI, such assets would be classified and measured at FVTPL.

When central banks become party to the contractual provisions of equity investments (for example, Bank for International Settlements, or BIS, shares), they can make an irrevocable election at initial recognition to classify and measure such equity investments at FVOCI\textsuperscript{11}. For unquoted equity investments such as BIS shares, central banks would be required under IFRS 9 to record fair value except under limited circumstances. In practice some central banks value BIS shares at net asset value less a 30 percent discount to estimate fair value. The 30 percent discount is a precedent of the International Court at The Hague’s decision for the BIS shares repurchase in 2001 and which is now used as the basis for determining fair value of BIS shares. In limited circumstances IFRS 9 allows the use of cost as a proxy for fair value. One example when this is allowed is where there is a wide range of possible fair value measurements and cost represents the best estimate of fair value within that range. Judgment will need to be used in the final assessment, and this will need to withstand the scrutiny of the auditors. The standard includes indicators where cost might not be used as an estimate of fair value, one such indicator being where evidence could be drawn from external transactions in the investee’s equity. Central banks may need to evaluate and justify the basis of valuation in light of the changes under IFRS 9.

ECL Impairment Approach to Foreign Reserves

The preceding sections dealing with classification and measurement are vitally important in ECL determination. Only foreign reserve assets measured at amortized cost or FVOCI fall in the scope of the ECL impairment model (but excluding equity investments for which irrevocable election was made to classify and measure at FVOCI). Any computed ECL charges will be reported through the profit or loss accounts, with the corresponding entries posted in either “other comprehensive income” or “loss allowance” accounts for assets measured at FVOCI or amortized cost, respectively.

For operational convenience, the standard provides a practical expedient option for assets that are deemed to have low credit risk. Examples of low credit risk assets include investment grade assets or assets so categorized by management based on central banks’ internal credit rating systems. Since most central banks hold investment grade and quoted instruments in foreign reserve portfolios because of the overriding capital preservation objective, electing the practical expedient approach under the ECL model is likely to be a viable option.\textsuperscript{12}

Under the practical expedient option, central banks need to compute only the 12-month ECL. The standard is intentionally not prescriptive and allows management to adopt a variety of methods in computing ECL. For more sophisticated central banks that already have an internal credit risk function as part of total financial risk management, the existing internal model is likely to be adequate in most cases.\textsuperscript{13} For the vast majority of the central banks, an acceptable and yet simple method would be to utilize an explicit probability of default approach:

$$\text{Expected credit losses} = \text{Exposure at default (EAD)} \times \text{Probability of default (PD)} \times \text{Loss given default (LGD)}.$$  

PD and LGD parameters can be derived from data published by global credit rating agencies (for example, Moody’s, Standard & Poor’s, and Fitch). A cursory review of the sovereign ratings transition matrices published by these rating agencies for a one-year holding horizon (12-month PD) reveals that investment grade sovereign debt (a common asset class for many central banks) usually has a zero or close to zero 12-month PD, in which case expected credit losses will be negligible.

Financial instruments deemed to have low credit risk are not required to be externally rated. Instead, central banks can use their internal credit ratings that are consistent with a global credit rating definition.
of *investment grade*. The low credit risk operational simplification is not meant to be a bright-line trigger for recognizing lifetime ECL when financial instruments are not considered to have low credit risk at the reporting date. In such a case, central banks must assess whether there has been a significant increase in credit risk since initial recognition and thus whether lifetime expected credit losses are required to be recognized.

For central banks whose foreign reserves include assets assessed as having high credit risk, the new ECL model is likely to result in process and/or accounting system changes. A direct input in the ECL model is information that impacts credit expectations. Therefore implementing the model will invariably be data intensive. As market data input will be used, it is foreseen that the effect on profit and loss may become more volatile, since impairment losses will be reported as profit or loss and may affect distributable income. Professional judgment will need to be made, and auditors will need to both understand and review the processes supporting the ECL calculations. The information will then need to be presented in a manner that is understandable to the users of financial statements and in compliance with the standard, disclosing quantitative and qualitative factors, including inputs, assumptions, and estimation techniques used to determine impairment losses.

Table ES.2, though not exhaustive, summarizes some of the issues that central banks need to consider to effectively implement the ECL impairment model in accordance with IFRS 9.

**Table ES.2 Issues in Implementing the Expected Credit Loss (ECL) Impairment Model**

<table>
<thead>
<tr>
<th>Considerations</th>
<th>IFRS 9</th>
<th>Possible focus points</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Portfolio review</strong></td>
<td>B5.5.22, B5.5.23, B5.5.24</td>
<td>Review existing holdings and determine if there are assets with high credit risks.</td>
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<td></td>
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<td>Review existing investment guidelines and align to IFRS 9 ECL model requirements.</td>
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<td></td>
<td>Clearly define criteria for low credit risk; at a minimum include issuers’ risk of default, capacity to meet obligations, and whether there are adverse economic conditions that may impact counterparties’ ability to meet obligations.</td>
</tr>
<tr>
<td><strong>Finance, credit, and market risk departments corroboration</strong></td>
<td>B5.5.41, B5.5.42, B5.5.43, B5.5.37</td>
<td>Policy and guidelines for determining default probabilities, loss given defaults, exposures at default, or mapping from external sources</td>
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<td></td>
<td></td>
<td>Corroboration between finance or accounting department with credit or market risk departments and leveraging existing infrastructure—perform internal credit rating systems review, if applicable</td>
</tr>
<tr>
<td><strong>ECL model review</strong></td>
<td>B5.5.28-29, B5.5.44</td>
<td>Models to calculate 12-month ECL and if needs be, lifetime ECL</td>
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<td>Policy for ECL discount rate (effective interest rate)</td>
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<tr>
<td><strong>Credit risk expectations</strong></td>
<td>B5.5.15-21</td>
<td>Policy for credit risk migration between stages 1, 2, and 3 and clearly defined credit events that constitute “significant increase in credit risk”</td>
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<td>Frequency of portfolio reviews and possibility of implementing “watch lists” to effectively monitor credit events</td>
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<td><strong>Governance</strong></td>
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<td>Model risk management frameworks: development, implementation, use, and ongoing model validation</td>
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<td>Roles and responsibilities between various departments</td>
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</table>

There are two potential missteps that central bank management may make with regard to implementing the ECL model.
1. **The first would be to panic.** Many have estimated it will take the entire remaining two and a half years to implement the standard and seem to suggest that entire information and accounting systems need to be overhauled. While the new standard is expected to be complex, it is also expected to be implemented without undue cost and effort. The implications of IFRS 9 on central banks’ domestic assets may require special attention and effort depending on the types of asset classes and asset classifications. However, the scope of this paper is limited to foreign reserve portfolio assets. Due to the conservative nature of central banks’ reserve portfolios and strategic asset allocations, electing the *practical expedient* option could be an operational simplification for most central banks. Central bank management should not panic, but rather start the assessment early, assess whether the practical expedient is applicable, and ensure that the principle of undue cost and effort is not compromised.

2. **The second is to start implementing IFRS 9 too late or to underestimate the implications and complexity of implementing the standard.** Implementing the ECL model will involve collaboration across several business lines, through which suitable models must be identified for calculating expected credit losses. Central banks should consider setting up an IFRS 9 implementation team that includes risk specialists in order to determine appropriate categorization logic, credit quality indicators, and thresholds for the three-stage model. It will be necessary to introduce processes and procedures on how to monitor changes in credit quality for allocation within the ECL model. There could be an impact on systems and processes, and that is why implementation impact assessment should start early. The new disclosures are far reaching, and central banks should not underestimate the effort required, including having systems and processes in place to collect data. IFRS 9 implementation teams should closely monitor the work of the ITG discussion forum.

**Conclusion**

With just two years remaining before the mandatory IFRS 9 implementation date of January 1, 2018, central banks have their work cut out. Early adoption of the standard is permissible. Starting February 2015, central banks that decide to early apply the standard will apply the version of IFRS 9 issued in July 2014 (see figure ES.3).

**Figure ES.3 Key Dates for Implementing IFRS 9**

<table>
<thead>
<tr>
<th>Issue date</th>
<th>Permitted to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>July 24, 2014</td>
<td>- Fully adopt IFRS 9,</td>
</tr>
<tr>
<td>Jan 2015 — Dec 2017</td>
<td>- Early adopt own credit requirements in isolation.</td>
</tr>
<tr>
<td>Effective January 1, 2018</td>
<td>Mandatory</td>
</tr>
</tbody>
</table>

IFRS 9 impact assessment should start early, with the collaboration of accounting and foreign reserves management departments. Work on assessing current foreign reserve assets classification under IFRS 9 and any associated transition adjustments should rank high on every central bank’s agenda of priorities. Internal business documentation will need to be aligned to IFRS 9 requirements for business model and contractual cash flow characteristics requirements.
The six factors for determining the business model provide a useful framework that central banks can use to perform classification and measurement assessment. When the assessment is applied to a portfolio or subportfolio, experience has shown that each of the six factors when considered separately can often lead to different classifications. Therefore, all of the factors need to be considered in totality. The importance of each factor to the business model is also likely to be different among central banks. Management must use best judgment to determine which objectives (held-to-collect, collecting-and-selling, or neither—for example, active trading to maximize fair value gains) for investing financial assets are most integral to the business model. Once the business model is determined, each financial asset must be assessed to determine whether contractual cash flows are SPPI.

When assessing the impact of the newly introduced ECL impairment model, central banks’ accounting departments must closely collaborate with credit and markets departments to determine the best approach to applying the model. Central banks are advised not to underestimate the potential level of preparation work, especially if systems need to be modified and new processes need to be designed.

Notes

1. While IFRS 9 will arguably have an equal or larger significant impact on central banks’ domestic asset base, this paper focuses only on implementing IFRS 9 on foreign reserve assets.
2. Due to lack of wide applicability to the central bank community, hedge accounting is outside the scope of this paper.
3. The IFRS Foundation develops the International Financial Reporting Standards through the IASB, its independent standard-setting body.
4. Reserves Advisory and Management Program (RAMP) engagements are designed to help official sector partners develop world-class asset management operations through building in-house capacity and employing financial service providers. For more, see the program’s website at http://treasury.worldbank.org/sip/htm/index.html.
5. Objectives of foreign exchange reserves were drawn from International Monetary Fund (2013), Guidelines for Foreign Exchange Reserve Management.
8. The Basis for Conclusions on IFRS 9 analyses the considerations of the IASB when developing IFRS 9 and includes an analysis of the feedback received on the proposals that preceded the standard and how the IASB responded to that feedback. It also includes an analysis of the likely effects of IFRS 9. While the Basis for Conclusions accompanies IFRS 9, it is not part of IFRS 9.
10. Per International Accounting Standard 24 Related Party Disclosures, key management personnel are those persons having authority and responsibility for planning, directing, and controlling the activities of the entity, directly or indirectly, including any director (whether executive or otherwise) of that entity.
11. Unrealized gains or losses for both debt and equity instruments measured at FVOCI are reported as other comprehensive income. However, since equity instruments are not assessed for impairment under IFRS 9, realized gains or losses for equity instruments are not recycled to profit or loss, whereas realized gains or losses for debt instruments are appropriately recycled to profit or loss. Instead, cumulative realized gains or losses for equity instruments may be transferred within equity accounts.
12. The practical expedient option per IFRS 9 paragraph 5.5.10 can be elected provided the following criteria per paragraph B.5.5.22 are met:
   1. The financial instrument has a low risk of default.
   2. The borrower has a strong capacity to meet its contractual cash flow obligations in the near term.
   3. Adverse changes in economic and business conditions in the longer term may, but will not necessarily, reduce the ability of the borrower to fulfil its contractual cash flow obligations.

Central banks’ objectives and strategic asset allocations usually ensure conservative investment guidelines, wealth preservation, capital stability, limited downside risk, and limited downside losses. These factors may indicate that the first two criteria are met. The third criterion does not mean that the economy might not change if the country went to war, or suffered a natural disaster, but only that at the time of impairment review none of these conditions exist.

13. Managers with questions are advised to contact RAMPAccounting@worldbank.org. RAMP’s credit risk and accounting professionals will be able to verify and assist.
References


