Annex 1: Central bank accounting policies

In this Annex, we document in more detail the accounting treatments used by a representative group of BIS shareholding central banks. The point of departure from the main text is Figure 5 (page 29), which summarises the accounting treatments of 16 central banks for price (value) changes (if relevant) of their assets and non-equity liabilities. Figure 5 is reproduced below, now labelled A1 (see the main text for details).

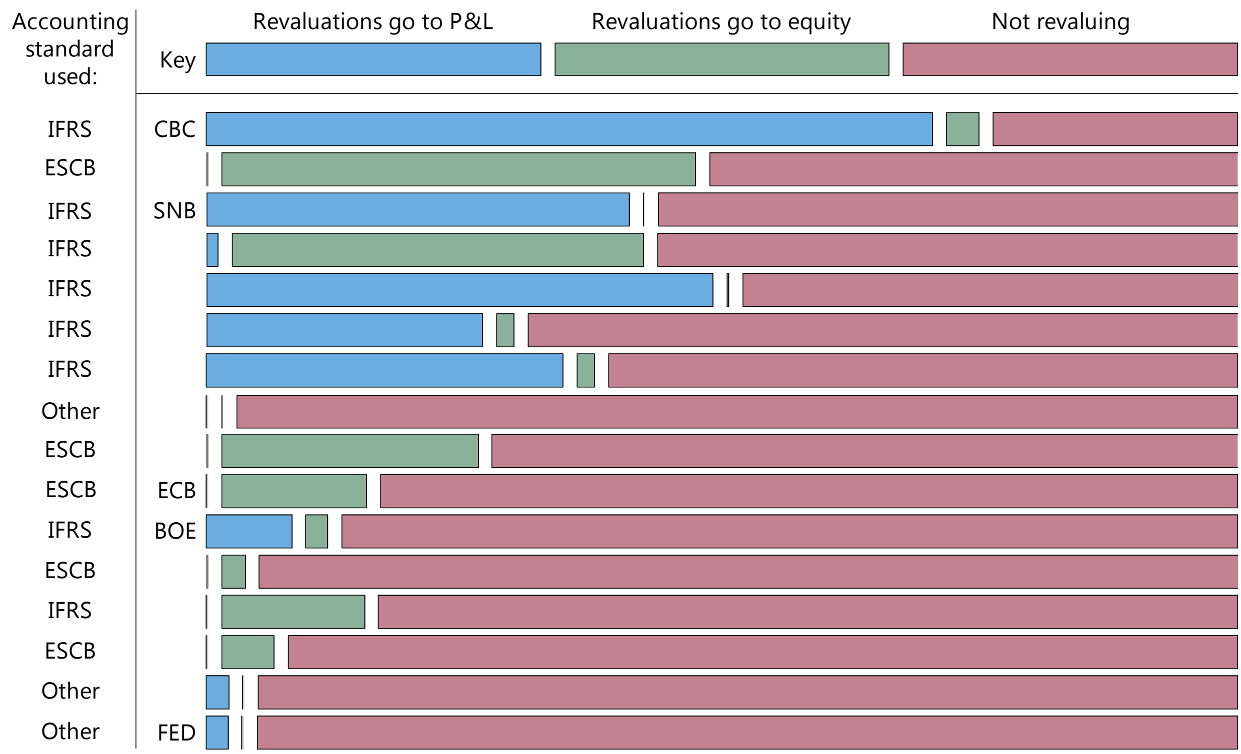
In a nutshell, the more blue in Figure A1, the more assets or liabilities are revalued with valuation changes going through P&L; the more green, the more revaluation accounts are used; and the more red, the more assets and liabilities are held at an unchanging book value (eg at acquisition cost).

Balance sheet composition by accounting treatment for price changes

(averages of financial years 2006-10)

Figure A1

The combined width of the horizontal bars reflects total assets plus liabilities (not including equity)



As before, the main things to notice are: first, the major part of the balance sheet, for the majority of central banks, is not subject to revaluation (red dominates.) Second, for items revalued as market prices change, revaluation gains and losses go to P&L and to revaluation accounts in about the same number of cases (blue and green are similarly represented). Third, the dominant accounting framework used provides relatively little insight (by itself) into the valuation dynamics of the balance sheet.

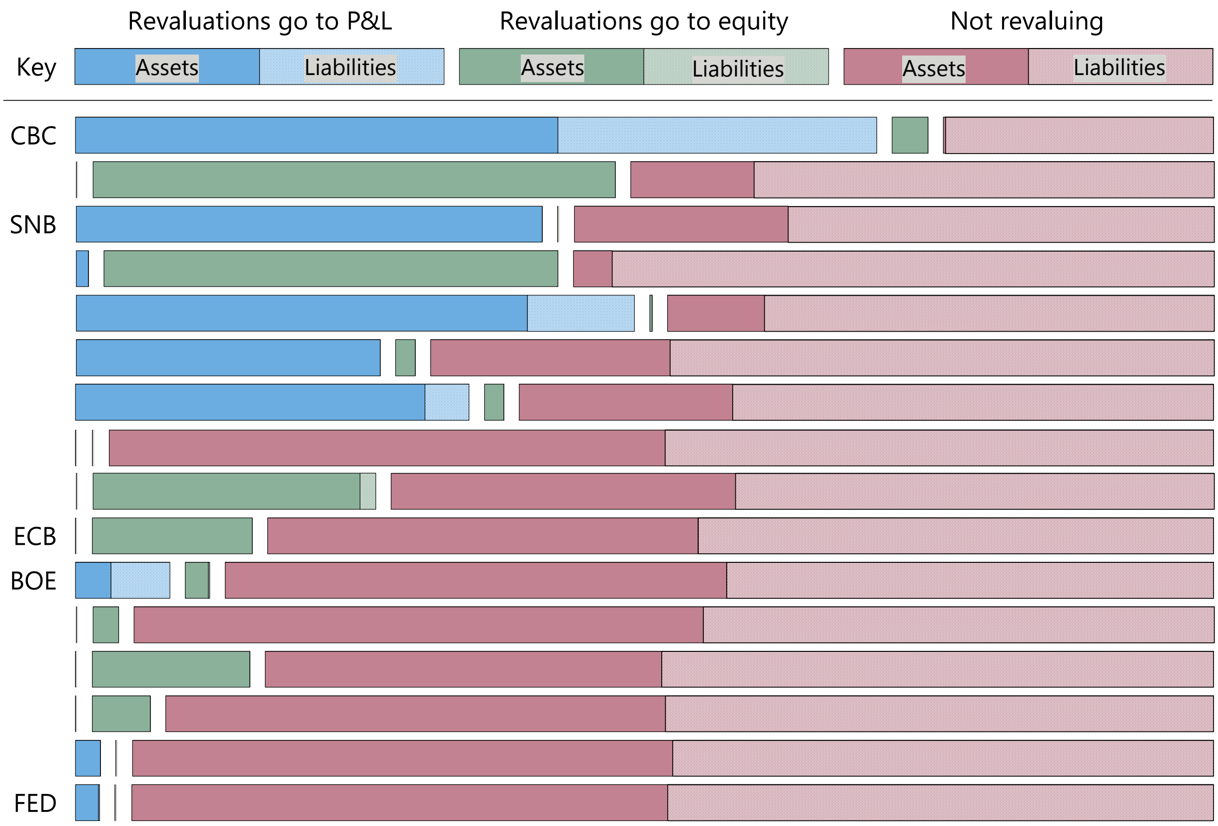
On the third point, the accounting treatment of financial positions depends both on the accounting standard/framework being followed *and* the inherent nature of the position. Central banks frequently have assets and liabilities that are not subject to change in nominal value, being legally and/or practically fixed. Regardless of the chosen accounting treatment, there are no revaluations.

a. Treatment of valuation changes, by assets and liabilities

It is very common for central bank liabilities to be dominated by banknotes and deposits at fixed values while assets are dominated by marketable securities that change in market (and fair) value. The resultant interest rate exposures are often much larger than would be contemplated by most types of commercial financial institution. If the accounting treatment registers those changes in value, the

Balance sheet composition by accounting treatment for price changes, by assets and liabilities

(averages of financial years 2006-10) Figure A2



financial statements will reflect the inherent dynamics of the institution's economic exposures. That such exposures are commonplace for central banks can be seen in Figure A2, which repeats Figure A1 but now with a decomposition into assets (on the left of each coloured block, solid in colour) and liabilities (on the right of each coloured block, crosshatched in colour). Substantial mismatches between the valuation treatments of assets and liabilities are revealed. (For example, looking at the fourth central bank from the top, assets are almost all revalued, but liabilities are not.)[118, 119]

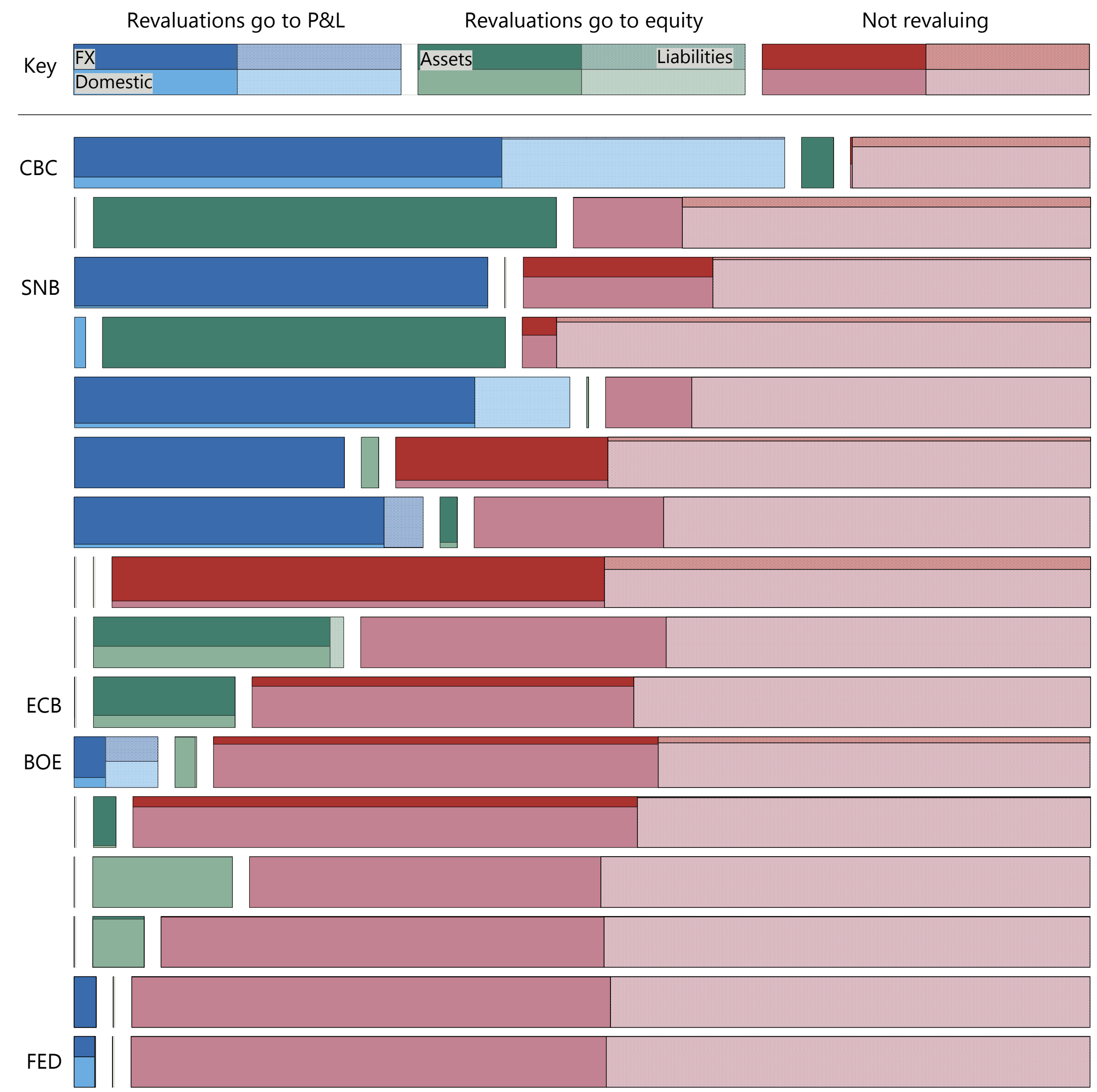
[118] Such valuation mismatches normally indicate an underlying interest rate mismatch, although they could in principle also be caused by an accounting treatment mismatch (whereby assets and liabilities with similar economic value sensitivities to changes in interest rates are accounted for differently).

b. Treatment of changes in value due to foreign exchange translation

At the same time, many central banks have assets in foreign currency (including gold); some also have FX liabilities. Again, both underlying and accounting mismatches arise (the latter mostly between assets of a similar type, where those in domestic currency are treated according to one accounting method, and those denominated in foreign currency to another). Figure A3 further breaks down the accounting treatment of assets and liabilities by currency denomination.

Balance sheet composition by accounting treatment for price changes, by assets and liabilities and by domestic and FX components

(averages of financial years 2006-10) Figure A3



119 The SNB (third from the top) is a case where assets are normally all revalued, but the majority of liabilities are not. Unusually, during the period 2008-10 the SNB had a claim (on the UBS Stabilisation Fund) that was not subject to revaluation. That position has run down subsequently.

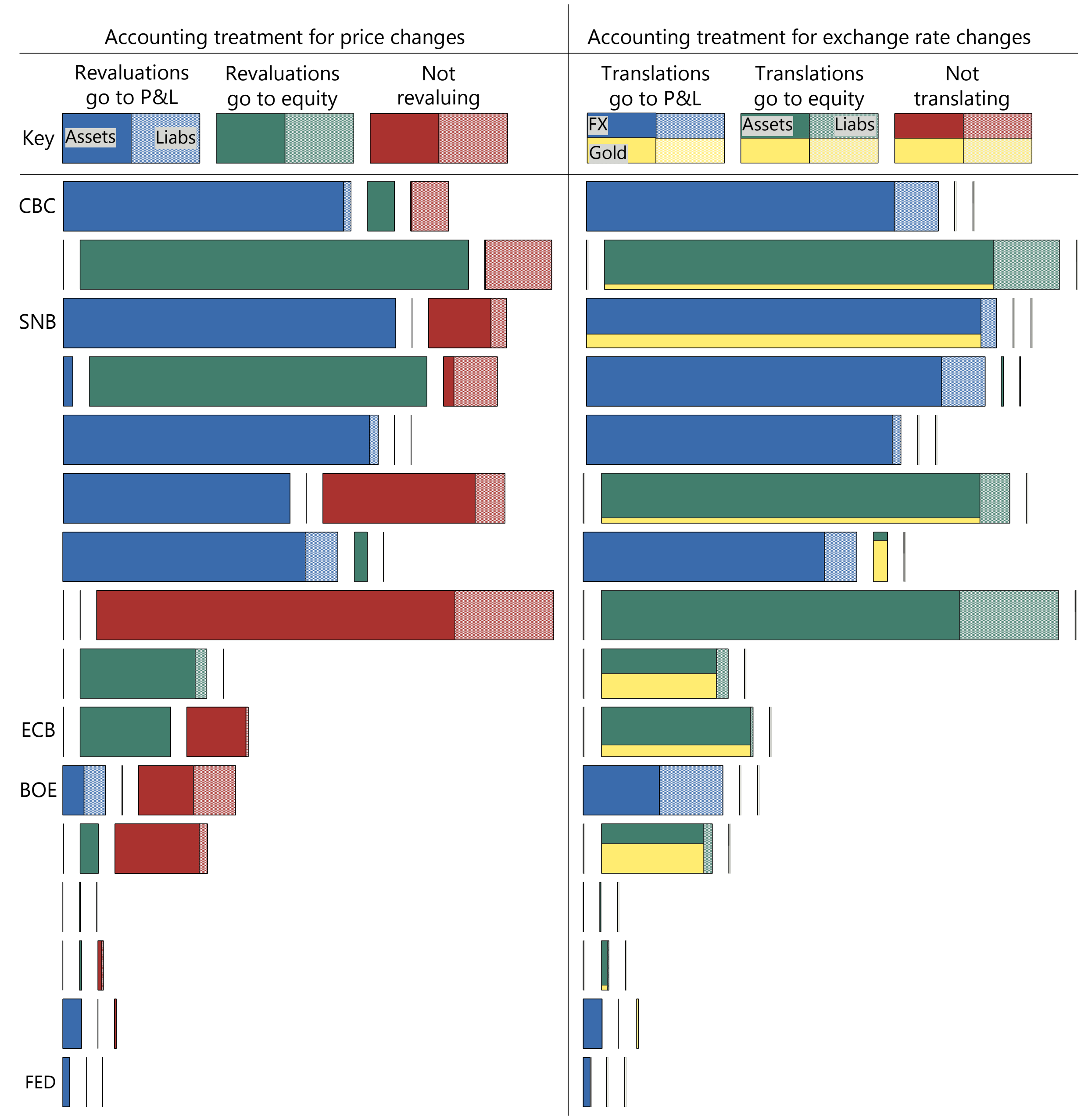
Here, two types of value change may be relevant:

- A foreign currency asset (or liability) may be subject to changes in market price or fair value, in the currency of denomination. The accounting treatment of these "price revaluations" is shown in Figure A3, which is a repeat of Figure A2 but with the addition of the further decomposition into foreign currency denomination (dark shades, in the upper part of each block) versus local currency denomination (light shades, in the lower part of each block).

Composition of FX components of the balance sheet, by assets and liabilities and by accounting treatment for price and exchange rate changes

(averages of financial years 2006-10)

Figure A4



- The accounting treatment of changes in the local currency value of the asset or liability arising from changes in exchange rates ("FX translation changes") is also determined by the accounting policies. To illustrate, consider differences in the accounting practices for changes in market price and for changes in exchange rates, Figure A4 focuses on foreign currency assets and liabilities alone. The accounting policy for changes in market price is shown in the left panel, and that for changes in exchange rates is shown in the right panel of Figure A4. Accounting treatments of FX translation changes are depicted in a manner analogous to those for price revaluations, using the same colour scheme. Gold is shown separately, at the bottom of the relevant accounting treatment block.

The main message to be drawn from Figure A4 is that very substantial exchange rate exposure mismatches exist within the central bank world. In the right panel, if FX liabilities exist at all (at the right side of each block in the right panel), they are small relative to FX assets (left side of each block). However, accounting policy differences are also identifiable. In several cases the accounting treatment of FX translations is different from that of price changes in the financial instruments denominated in foreign currency.

In sum, actual accounting treatments vary widely, even between central banks using the same accounting standards, and between central banks with similar underlying balance sheet structures. In view of the large economic exposures that central banks often carry, accounting policies can thus have an important impact on P&L dynamics.