Annex 2: Components of selected distribution schemes

This Annex presents the data underlying Figure 7, in a table (Annex Table A5) that is organised so as to distinguish the elements of distribution schemes that prevent a distribution asymmetry arising, or having a permanent effect on the capital position of the central bank, from those that do not work against such an asymmetry. The elements in the former category (placed at the top of the table; in deeper shades of green as their strength rises) work to make the financial position of the central bank more robust to large negative variations in distributable profit; the elements in the latter category (placed at the bottom of the table, not coloured) do not.

At the top of the table are two cases where losses can to a significant extent be offset by tapping external resources in the same time period. In the Bank of Korea's case, the law provides that if reserves go to zero, the government budget will make up any remaining deficiency, as long as that capital remains positive. In the ECB's case, losses can be covered by appropriating the monetary income that would otherwise remain with NCBs. The Bank of Korea's access to external resources is hard-wired into law as non-discretionary. The ECB's would require the votes of the Governing Council, which comprises Governors of euro area central banks whose own financial positions would be adversely affected.

Also in this area of the table are distribution scheme elements that provide for additional retentions when the central bank's financial strength has been depleted. Such conditional distribution mechanisms include capital targets, or mechanisms that act like targets that affect the distribution beyond the year in which a loss led to a depletion of reserves. Thus, distributions can be stopped until reserves are rebuilt (in the cases of strongly acting state contingent mechanisms) or at least adjusted in favour of higher retentions (in the cases of modestly acting state-contingent mechanisms).

The area in the table shaded light green contains certain mechanisms that could, under certain circumstances, provide strong protection against a distribution asymmetry, but without as much certainty as mechanisms higher in the table. For example, the discretion provided to the Deutsche Bundesbank and the South African Reserve Bank to create provisions is in principle constrained by tests of a qualitative nature (as indicated by the use of qualifiers such as "reasonable"/"normal"). In recent times, these banks have both allowed substantial control over retentions. The Riksbank's trailing five-year average distribution guards directly against that part of the distribution asymmetry associated with high variance in P&L, but may still mandate large distributions well into a longer-lasting episode of weakness in the Riksbank's finances.

The unshaded block of the table contains elements of distribution schemes that have somewhat more uncertain effects on the financial strength of the central bank, as they may expose the bank to a distribution asymmetry, depending on how net income variance turns out compared with normal net income. In many of these cases, distribution is on a standard sharing basis – often 5%, 10% or 20% is or may be retained, and the rest must be distributed. With these mechanisms, if normal net income is low, reserves may accumulate too slowly to cover an occasional loss. And the mechanisms are non-contingent, so that hits to reserves would not trigger greater retention in following years, potentially making equity a random walk around a declining path – unless offset by another component of the distribution schemes, as, for example, in Chile and Korea's cases (and to a certain extent, the Netherlands too).

A categorised list of components of distribution schemes (excluding residual distributions to governments) — Annex Table A5

Category		Cases	Details The relevant Article or Section number of the applicable law is noted; B/A refers to "By Agreement"
Can draw on external resources	Cover losses	Korea	Art 100: If reserves are insufficient to absorb a loss for the year, the budget will make up the deficiency.
		ECB	Art 33: If reserves are insufficient, the Gov Council may appropriate the ESCB's entire monetary income for the year.
		Peru	Art 93: If reserves are insufficient to make up loss, Treasury must issue and deliver to bank non-negotiable, interest-bearing debt titles to make up deficiency
Equity target or equivalent that either (a) allows future surpluses to be retained to an unusual extent, to cover losses and/or rebuild equity or (b) allows retentions to build buffers towards a target level.	With strong-acting effect on the distribution (up to 100% of any year's surplus can be retained in order to achieve the targeted outcome).	Czech Rep	Art 47: surplus shall be used to replenish reserves.
		US	S7 + B/A: surplus retained to maintain reserves = paid-in capital (around 1% of assets recently). Paid-in capital grows with member bank capital.
			B/A: Transfers to Treasury stop in the event of a loss, until loss is fully covered. (Accounting treatment would give the appearance of no reduction in capital, notwithstanding losses that exceed capital plus reserves.)
		Switzerland	Art 99 (Const) + Art 30 (Act) + B/A: first allocation to a reserve determined by the Bank (recently, a target that grows with nominal GDP). (Reserve has been in range of 15-30% of assets recently.)
			Art 99 (Const) + Art 30 (Act) + B/A: standard distributions halted if below target reserve
		Chile	Transitional provision (S2): All of surplus can be retained until capital = mandated initial capital (indexed).
		ECB	ECB/2010/24: ECB may transfer up to 100% of surplus to a general risk provision [limited to paid-up capital less general reserves].
		Mexico	Art 55: All surplus retained if there are negative reserve balances.
		Iceland	Art 34: If equity is less than 2.25% of lending and domestic securities assets of credit system, 2/3 of profit are retained
		Finland	Art 21: Part of loss that is not covered by reserves can be left temporarily uncovered, and any profits in subsequent years shall be used first to cover such uncovered losses.
		Singapore	Art 6: All net profit retained if General Reserve Fund less than half paid-up capital; not less than 30% of net profit retained if General Reserve above half but less than twice paid-up capital.

A categorised list of components of distribution schemes (excluding residual distributions to governments)

Annex Table A5

Category		Cases	Details
Equity target or equivalent that either (a) allows future surpluses to be retained to an unusual extent, to cover losses and/or rebuild equity or (b) allows retentions to build buffers towards a target level (continued)	With modest-acting effect on the distribution (a capped amount of the surplus can be retained in order to achieve the targeted outcome, and/or the targeted outcome is quite capped).	Germany	Art 27: 20% of surplus or €250m (whichever greater) until reserves ≥ €2.5bn.
		Netherlands	B/A: 1/6th of an earlier loss, for following 6 years (implicit capital target = capital level before loss).
		Peru	Art 92: 75% of net profit to be used to constitute and increase reserve fund [limited to capital]
		Israel	Art 76: If capital is 1% or less of total assets all profits shall be retained; if capital is between 1% and 2.5% of total assets 50% of net profits (less the surplus balance (=accumulated profits & losses from previous years) if it is negative) is to be transferred; if capital is 2.5% of total assets or more, net profits (minus surplus balance if negative) are to be transferred.
		Philippines	Art 44: 50% of net profits to be carried to surplus (however, full capital subscription remains outstanding)
		Thailand	Art 14: 25% of net annual profit (after deduction of accumulated loss) to general reserve.
		Turkey	Art 60: 20% of annual net profit to be allocated to reserve fund.
		Spain	Art 1.1.b of Royal Decree 2059/2008: 90% of profits earned to be paid to Treasury
		Poland	Art 62: 5% of profit to reserve fund [limited to paid-up capital]
		ECB	Art 33: 20% of surplus may be retained to replenish general reserve if below 100% of paid-up capital.
Full bank discretion		Germany	May transfer to a general risk provision (above the line) without specific limit, but subject to "reasonable commercial judgment" test.
		India	Art 47: May make provisions without specific limit, subject to “usually provided for by bankers” test
		Malaysia	Art 7: Provisions may be made without specific limit, subject to “usually provided for by bankers” test; reserves may be established as Board deems prudent or necessary.
		Singapore	Art 6: Provisions may be made without specific limit, subject to “usually provided for by bankers” test; General reserves may be established as Board deems prudent or necessary.
		Slovakia	Art 39(4): NBS shall use profit for allocations to reserve fund and other funds created from profit, or for covering accumulated losses from previous years.
		South Africa	S 24: SARB may create provisions without specific limit, but subject to “normally provided for by bankers” test, and payment of the dividend. Transfers to provisions have recently absorbed over 90% of the surplus.
		Turkey	Art 59: Provisions in amounts deemed appropriate by Board may be set aside from gross profit to meet contingent risks in future years due to operations exclusive to the Bank.

A categorised list of components of distribution schemes (excluding residual distributions to governments), continued.

Annex Table A5

Category		Cases	Details
Distribution smoothing		Sweden	B/A: Dividends are paid from a five-year trailing average of adjusted income.
		Switzerland	B/A: CHF1b pa to cantons for 5 years, subject to non-negative balance in distribution reserve.
Retention of a set or restricted share of each year's surplus (not contingent on the capital position)	By category	Netherlands	B/A: All profits from gold sales to general reserves.
	By per cent of each year's surplus	Sweden	B/A: 20% of smoothed (five-year avg) surplus retained.
		Ireland	SI93: CBI may retain up to 20% of surplus.
		UK	Act: ½ of surplus of Bkg Dept & 0% of Issue Dept retained; typically <15% of total net income available for distribution.
		Korea	Art 99: 10% of surplus retained to build reserves.[1]
		Chile	Art 77: CBC may retain up to 10% of surplus.
		Netherlands	B/A: 5% of surplus net of gold profits & smoothing retentions.
		Iceland	Art 34: If equity is at or above target then 1/3 of profits can be retained (otherwise 2/3; see above)
		Japan	Art 53: 5% of surplus retained to build reserves.
		Finland	Art 21: 50% of profit shall be transferred to the reserve fund.
		South Africa	S 24: 10% of profit after tax, dividend and discretionary provision retained in a statutory reserve.
	Limited by an absolute amount	Canada	Art 27.1: Create and maintain a special reserve fund (up to CDN 400 million) to offset unrealised valuation losses on investment portfolio
Joint decision	Systematised	Chile	S 5: Board may request a capital increase (which under S 77 may be funded by retention of surplus).
		Japan	Art 53: BoJ may retain additional amounts to build reserves, on authorisation of Minister of Finance.
		Finland	Art 21: 50% of profit shall be transferred to the reserve fund, but Parliamentary Supervisory Council may decide on other use of profit if justifiable given Bank's financial condition or size of reserve fund. (In practice Board makes related proposal to supervisory council.)
		Denmark	Art 19: Board of Directors may decide on amount allocated to reserves, with approval of Royal Bank-Commissioner. (In practice, reserves are maintained at a constant level in real terms.)
		Australia	Art 30: Treasurer, after consultation with RBA Board, may determine amounts to be set aside for contingencies or into Reserve Fund
		Malaysia	Art 7.4: Minister, on recommendation of Board, may credit part of net profit to General Reserve Fund.
		Thailand	Art 14: Other reserves may be established for particular purposes, as specified by Board, on approval by Minister
		New Zealand	Art 162: Bank must recommend dividend, consistent with statement of intent; Minister must determine dividend; both recommendation and determination to be published.

A categorised list of components of distribution schemes (excluding residual distributions to governments)

Annex Table A5

Category		Cases	Details
Joint decision (continued)	*Systematised (continued)*	Israel	Art 76: Bank may record capital funds originating in accounting rules, if balance of net profits not transferred to government (per rules above) is added to "surplus balance" and not recognised as other capital item, unless Governor and Minister agree otherwise.
		Korea	Art 99: BoK may, with approval of government, establish reserves, for specific purposes.
	Unspecified	Mexico	Negotiation was used in 2008.
At government discretion		(none)	
Standard/promised distribution, limited conditionality		Switzerland	B/A: CHF1b pa to cantons for 5 years, subject to non-negative balance in distribution reserve.
		US	S 7: 6% dividend on paid-in capital.
Mandatory unconditional distribution		South Africa	S 24: 10 cents per share = R200,000 pa.
		Switzerland	6% of face value of shares (trivial amounts involved).

[1] The retention ratio is being adjusted upwards from 10% to 30% as a result of a revision to the Bank of Korea Act, which will be in effect as of 17 December 2011.