

**IMF Paper on Policy Analysis and Assessment**

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September 16, 1998

PPAA/98/9  
Correction 1

Subject: Systemic Banking Distress: The Need for an Enhanced Monetary Survey

**CORRIGENDUM**

Pages 3 and 11 of PPAA/98/9 (August 1998) are reissued to correct lines repeated at the top of and omitted from the bottom of page 3. Corrected pages are attached.

Att: (2)

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and end-March 1997, based on figures reported by deposit money banks, including the central bank. The figures for end-1996 onward incorporate the effects of bank restructuring launched in December 1996, which included the closure of two large insolvent banks, and the issuance of government bonds in place of their nonperforming loans. For our purposes, the two monetary aggregates of interest are credit to the nongovernment nonbank domestic sector and broad money, which represent, respectively, the core of commercial banks' assets and liabilities, i.e. loans and deposits. Credit extended to nonbanks has a large direct impact on the growth rate of output, while the private sector's desire to hold money balances in the banking system (the demand for money) is an important determinant of the rate of inflation.

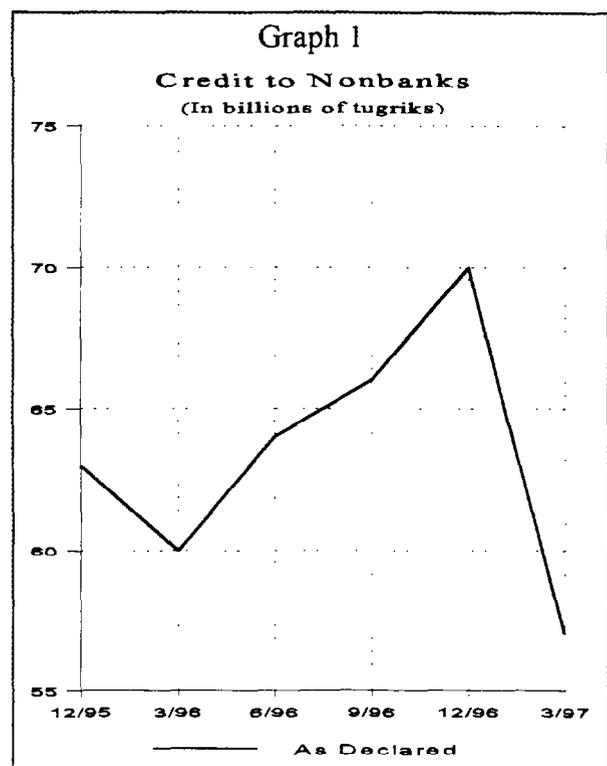
Table 1. Monetary Survey - As Declared						
	12/95	3/96	6/96	9/96	12/96	3/97
<b>Net foreign assets</b>	<b>46.5</b>	<b>38.8</b>	<b>34.8</b>	<b>46.0</b>	<b>68.6</b>	<b>79.5</b>
<b>Net domestic assets</b>	<b>55.5</b>	<b>63.2</b>	<b>71.9</b>	<b>69.2</b>	<b>59.8</b>	<b>35.0</b>
Domestic credit	59.7	62.6	73.3	62.4	90.2	82.5
to Government	(2.9)	3.0	9.7	(3.9)	19.9	25.7
to nonbanks	62.6	59.6	63.6	66.3	70.3	56.8
Other items net	(4.2)	0.6	(1.4)	6.8	(30.4)	(47.5)
<b>Broad Money</b>	<b>102.0</b>	<b>102.0</b>	<b>106.7</b>	<b>115.2</b>	<b>128.4</b>	<b>114.5</b>

**A. Credit to nonbanks**

Owing to the wide variation in national practices, the generally recommended procedure in the compilation of the standard monetary survey is not to net out specific provisions for nonperforming financial assets but to measure credit to nonbanks in gross

terms.<sup>2</sup> In such a presentation, gross credit to nonbanks includes current loans, principal and interest in arrears, capitalized interest, and non-performing loans at face value. Provisions against nonperforming loans are treated as capital and appear in other items net (OIN). When the necessary loan-loss provisions are made, the increase in provisions is offset either by a decline in profits or a reduction in capital, and OIN, credit to nonbanks and NDA remain unchanged.

Graph 1 shows that following an initial moderate reduction, the volume of credit to nonbanks steadily increases until a point of crisis is reached in December 1996 in the form of an acute liquidity shortage as the increase in gross claims reflects the financing of borrowers' accumulated losses rather than the healthy expansion of business activity. As is typical in such cases, the fact that a number of banks carried a high proportion of nonperforming loans in their portfolios was well-known, and



could have been assessed to some extent, long before the crisis arose. Although the correct amount of provisions against nonperforming loans was booked in December, as explained above, this adjustment is not reflected in the standard monetary survey until end-March 1997, when the write-down of bad assets is carried out, assumed by the government, and

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<sup>2</sup>/ IMF, *Draft Manual on Monetary and Financial Statistics*, July 1997; p.5-18.

actual broad money, while rising, was constrained throughout the period up until the liquidation of banks and the write-down of deposits. From that point on, however, the standard monetary survey indicated that money demand was falling whereas in fact it was increasing, as measured by the improved availability of deposits (see section IV.B below). A tightening of monetary policy based on the belief that money demand was falling would have inappropriately rationed the availability of credit at a time when the demand for money was in fact increasing. Third, as a direct consequence of the first two points, any financial program based on projections of monetary aggregates and estimates of money demand from a standard monetary survey at any point in time prior to March 1997 would be fundamentally flawed.<sup>15</sup>

#### **IV. Compilation of an Enhanced Monetary Survey**

Whenever feasible, the standard monetary survey should be adjusted before bank restructuring is initiated and while insolvent banks are still operating, so that an enhanced monetary survey can be used as an additional instrument for economic analysis and policy formulation. In practice, in many cases, supervisory authorities have some knowledge of which banks are likely to be concealing underlying problems, and it may be necessary for them to conduct on-site inspections of problem banks, at least for the largest ones, to compile more accurate balance sheet data. Admittedly, even with on-site inspections, the practical difficulty in obtaining estimates of the true amount of nonperforming loans and available deposits *before*

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<sup>14</sup>(...continued)

overestimated owing to the large share of nonperforming loans.

<sup>15</sup>/ On this point, see also Garcia-Herrero (1997); p.55; and 'Bank Soundness and Macroeconomic Policy', Appendix III (Financial Programming When the Banking System is Unsound), Executive Board Paper, SM/96/40; February 12, 1996.

*the outbreak of a crisis* should not be underestimated and on-site inspections may not always be feasible in practice as such inspections take time.<sup>16</sup> However, the important point is that such adjustments, if feasible, should be made even if they are based only on partial or crude estimates of the true underlying condition of banks, to be in a better position to monitor and analyze the macroeconomic consequences of systemic banking distress more accurately.<sup>17</sup> Specifically, adjustments are suggested in the compilation of at least two principal monetary aggregates: credit to nonbanks (private sector and public enterprises) and broad money. The following section details the adjustments that were made to the monetary aggregates in Mongolia.

#### A. Credit

On the credit side, three enhancements are suggested. First, credit to non banks should be split between performing and nonperforming loans. Second, provisions for non-performing loans should be extracted from other items net and deducted from the gross amount of credit. The first two steps only involve reclassifications and do not call for any adjustment yet to the figures reported by the banks. However, as shown in Graph 3, the profile of the credit curve net of provisions is already significantly altered. During the first two quarters of 1996, the gross and net credit curves remain parallel, as the problem banks are not provisioning their nonperforming loans. The two begin to diverge during the third quarter, as banks begin to

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<sup>16/</sup> As an illustration of the practical difficulties involved, the adjustments to the monetary survey in Mongolia were made only *after* the outbreak of the banking crisis. It would have been difficult, *although not impossible*, to make adjustments prior to the onset of the crisis because the central bank did not have the necessary legal authority to write-down assets and deposits by as much as it would have wanted to.

<sup>17/</sup> This underscores the importance of effective banking supervision.