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To accompany

“Economic Reforms and State Sector Bankruptcy in China”

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Individual balance sheets,
consolidated balance sheets for 1978, 1980, 1985, 1990, 1995, 1996, 1997, and 1998,
additional explanations to Table 3 in the paper.

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Table 1. Balance Sheet of Financial Institutions (b yuan)

	1978	1980	1985	1990	1995	1996	1997	1998
Assets								
Total loans	189.51	249.17	630.56	1768.07	5053.80	6115.28	7491.41	8652.41
(of which to urban collective-owned enterprises)	(4.98)	(7.81)	(31.06)	(97.71)	(214.60)	(263.88)	(-)	(-)
(of which to private ind. and com. enterprises)	(0)	(0.02)	(1.07)	(4.02)	(19.62)	(27.98)	(38.66)	47.16
(of which to foreign-funded enterprises)				(-)	(99.92)	(134.63)	(189.09)	248.75
(of which "others")	(0)	(0.41)	(18.04)	(135.24)	(1039.35)	(864.13)	(1234.32)	1362.04
(of which to agricultural households)	(1.12)	(1.59)	(19.42)	(51.82)				
(of which to "agriculture")	(16.07)	(25.75)	(81.66)	(241.28)	(301.91)	(712.30)	(835.04)	1002.42
Claims on government	0	17.02	27.51	80.10	158.21	158.21	158.21	158.21
Securities	0	0	0	2.49	316.69	410.42	367.17	811.22
Gold	1.22	1.22	1.20	1.20	1.20	1.20	1.20	1.20
Claims on intl. fin. institutions	0	3.60	8.87	25.90	55.51	54.14	53.44	46.18
Foreign exchange	1.43	-0.84	9.31	59.94	677.45	957.87	1346.72	1372.83
"Others"		2.80	12.15					
Total	187.65	272.97	689.60	1937.70	6262.86	7697.12	9418.15	11042.05
Liabilities								
Total deposits	117.96	171.31	458.84	1401.26	5386.22	6857.12	8239.03	9569.79
(of which by government)	(18.74)	(16.45)	(36.84)	(38.04)	(100.32)	(127.10)	(157.24)	(218.79)
(of which by administrative units)	(15.98)	(22.95)	(32.58)	(61.48)	(89.98)	(94.77)	(85.86)	(128.54)
(of which by households)	(21.06)	(39.94)	(162.26)	(711.98)	(2966.22)	(3852.09)	(4627.98)	(5340.75)
Financial bonds	0	0	0.82	10.83	168.36	247.71	2.99	5.62
Currency in circulation	21.20	34.62	98.78	264.44	788.53	880.20	1017.76	1120.42
Liabilities to intl. fin. inst.	0	3.18	6.99	18.57	38.24	29.53	19.65	17.44
"Others"	10.81	12.36	34.13	81.88	-457.98	-709.86	-327.46	-255.00
Equity	42.19	51.50	90.04	160.72	339.49	392.42	466.18	583.79
Total	187.65	272.97	689.60	1937.70	6262.86	7697.12	9418.15	11042.06

Definition of “financial institutions:”

The financial institutions covered in the data for 1990 through 1998 are: People’s Bank of China, the three policy (or development) banks, the four state commercial banks, other commercial banks, urban commercial banks, urban credit cooperatives, rural credit cooperatives, post office savings offices, financial trust and investment companies, finance companies, and financial leasing companies. (ZGJRNJ 1997, 464; ZGJRNJ 1998, 508; ZGJRNJ 1999, 304) The financial institutions covered in the data for 1978 through 1985 are: People’s Bank of China, four state commercial banks (the Construction Bank of China beginning in 1985 only), the rural credit cooperatives, and possibly the China Investment Bank. (China Financial Statistics (1952-1991), 1) No other financial institutions existed prior to 1986; the statistics on urban credit cooperatives and trust and investment companies begin in 1986 only with data close to zero.

All these financial institutions except the rural credit cooperatives are owned by either central or local governments or by state-owned enterprises. Rural credit cooperatives are officially owned by farmers. However, with severely negative net worth and an implicit central bank deposit guarantee as well as at present direct central bank administration, they are treated here as state-owned financial institutions.

Other definitions:

“Foreign-funded enterprises” (*sanzi qiye*) denotes equity joint ventures, contractual joint ventures, and wholly foreign-owned enterprises.

“Financial bonds” (*jirong zhaiquan*) denotes bonds issued by financial institutions.

Explanations on consolidating rural credit cooperatives (RCCs) and the state banks in 1978 through 1985:

For the years 1978 through 1985 no consolidated balance sheet of all financial institutions is available. With the only financial institutions being the “state banks” (People’s Bank of China and the four state commercial banks) and the RCCs, their 1980 and 1985 balance sheets were consolidated as follows. Total lending by all financial institutions equals total lending by the state banks plus total lending by RCCs. Other assets by all financial institutions equals other assets of RCCs minus RCC borrowing from state banks (according to the RCC balance sheet).

Lending to agricultural households reflects lending by RCCs to agricultural households only (such a lending category is not available for state banks, nor for all financial institutions after 1985); since 1995 this category no longer exists for RCCs. In 1990 data according to both the old and the new categorization are available. According to the old categorization (in *China Financial Statistics (1952-1991)*), in 1990 total RCC loans amounted to 141.301b yuan, of which loans to agriculture 13.412b yuan, loans to township- and village enterprises 70.072b yuan, loans to agricultural households 51.822b yuan, and other industrial and commercial loans 5.995b yuan (ZGNCJRTJNJ 1991, 70). According to the new categorization (in ZGNCJRTJNJ 1996, 60), in 1990 total loans amounted to 141.301b yuan, of which loans to agriculture amounted to 65.234b yuan (equal to the former categories “loans to agriculture” plus “loans to agricultural households), loans to township- and village enterprises to 70.072b yuan, and other loans to 5.995b yuan.

Agricultural loan data in the consolidated balance sheet of all financial institutions after 1985 comprise loans to agriculture by all financial institutions. The 1990 data on agricultural loans by all financial institutions (in ZGJRNJ 1997, 464) approximately match the sum of agricultural loans by state banks plus all loans extended by RCCs to agricultural collectives, township and village enterprises, and farm households (in *China Financial Statistics (1952-1991)*). Agricultural loans in 1978, 1980, and 1985 thus are constructed accordingly. “Loans to agriculture” then in fact comprise all loans extended in the countryside by any financial institution.

Total deposits by all financial institutions equals total deposits at state banks plus total deposits at RCCs minus deposits by the RCCs at the state banks (according to the RCC balance sheet). Equity of all financial institutions equals equity of state banks plus equity of RCCs. Other liabilities of all financial institutions equals other liabilities of state banks plus other liabilities of RCCs. Household deposits at all financial institutions equals household deposits at state banks plus households deposits at RCCs.

For the year 1978 no balance sheet for RCCs is available, only deposit and lending data. Lending to agricultural households is again from the RCC balance sheet, and household deposits at all financial institutions again equals household deposits at state banks plus household deposits at RCCs. Total lending by all financial institutions equals total lending by state banks plus total lending by RCCs. Total deposits at all financial institutions equals total deposits at state banks plus an amount equivalent to total loans of RCCs. (This assumes that the difference of total deposits at RCCs and total loans by RCCs is held at the state banks; it is not included in the balance sheet of all financial institutions in order to avoid double-counting). RCC equity, which in 1980 accounted for 3.64% of the equity of all financial institutions, is neglected in 1978.

Financial bond data:

The financial bond data from ZGJRNJ used here closely matches the sum of policy financial bonds (*zhengcexing jinrongzhai*; issued by the policy banks to other financial institutions) and “other financial bonds” (*qita jinrong zhaiquan*; issued by non-policy financial institutions) in ZGZQQHTJNJ 1998, except for the year 1997 when the latter source shows continued increases. With the policy financial bonds accounting for more than 95% of all financial bonds and these bonds having been sold by the policy banks to other financial institutions, it is likely that in the balance sheet of all financial institutions these bonds have been consolidated out against the asset item “securities” in 1997. In 1997, the financial bonds listed in the balance sheet here approximately match the “other financial bonds” in ZGZQQHTJNJ 1998.

1998 equity:

No equity data are available for 1998 in the source of all other balance sheet data (ZGJRNJ 1999), and equity is presumably included in the category “others” which amounted to 328.79b yuan. According to the *People’s Bank of China Quarterly Statistical Bulletin Vol. 18* (No. 2, 2000), 15, the equity value at end-1998 was 583.79b yuan. This implies that “others” should be equal to -255.00b yuan. (The category “others” in the quarterly statistical bulletin is listed with only -86.52b yuan, but this value is ignored in order for the balance sheet to balance.)

Assumptions used in deriving the consolidated balance sheet of the state sector:

All bank loans that are not explicitly marked as having been extended to urban collective- as well as privately (or individual-) owned enterprises and foreign-funded enterprises have been extended to state-owned enterprises. This may not be fully true of the item “others,” which may, for example, include small amounts of real estate lending to households, or the item “agricultural loans.” On the other hand, urban collective-owned enterprises are often de-facto state-owned enterprises. This may have been acknowledged in 1997 when the category loans to urban collective-owned enterprises disappeared; loans to industrial (implicitly state-owned) enterprises increased over-proportionally between 1996 and 1997 and can easily have swallowed much if not all of the loans to urban collective-owned enterprises.

It is assumed that privately owned industrial and commercial enterprises do not hold deposits as enterprises but as households.

It is assumed that urban collective-owned enterprises and foreign-funded enterprises have deposits equal to their loans. (Deposit data specifically for these two categories are not available.) This implies that the 1997 restructuring of the balance sheet of all financial institutions is without effect on the consolidated balance sheet. These enterprises hold no currency.

Bank deposits of SOEs equal total deposits minus deposits by households, government and administrative units, as well as minus an amount equivalent to the loans to foreign-funded and urban collective-owned enterprises.

Since financial data are available only with two decimals while all other data carry three decimals, the third digit of the financial data wherever it entered other balance sheets was taken to be zero.

Sources:

1998: ZGJRNJ 1999, 384.

1997: ZGJRNJ 1998, 508.

1996, 1995, 1990: ZGJRNJ 1997, 464. (Loans to agricultural households 1990: ZGNCJRTJNJ 1991, 70.)

1985, 1980, 1978: China Financial Statistics (1952-1991), 5f, 10f for data on state banks; ZGNCJRTJ 1979-1989 for 1980 and 1985 RCC data; China Financial Statistics (1952-1991), 62 for 1978 RCC data.

Table 2. Balance Sheet of State-Owned Enterprises (b yuan)

	Industry	Constr.	Commer.	Sub-total	Other sectors	Total
1998						
Assets						
Current assets	2955.903	<u>465.496</u>	830.216	<u>4251.615</u>	<u>2111.597</u>	<u>6363.212</u>
Fixed assets	3873.411	<u>127.725</u>	242.490	<u>4243.626</u>	<u>2107.630</u>	<u>6351.256</u>
Intangible, defer.						
Other assets	<u>662.313</u>	<u>35.855</u>	<u>116.559</u>	<u>814.727</u>	<u>404.640</u>	<u>1219.367</u>
Total assets	7491.627	629.076	1189.265	9309.968	4623.867	13933.835
Net fixed assets*				<u>3147.257</u>	<u>1563.109</u>	<u>4710.366</u>
Liabilities and equity						
Total liabilities	4774.838	489.794	967.236	<u>6231.868</u>	<u>3095.105</u>	<u>9326.973</u>
(Ent. bonds)						(67.693)
Equity	2675.922	139.281	<u>222.029</u>	<u>3037.232</u>	<u>1508.465</u>	<u>4545.697</u>
(Non-negotiable A-shares)						(1374.928)
						[779.125]
(Negotiable A-shares)						(555.002)
						[296.148]
(B-shares)						(20.635)
(H-, N-shares)						(76.366)
Other liabilities	<u>40.867</u>			<u>40.867</u>	<u>20.297</u>	<u>61.164</u>
Total	7491.627	629.076	1189.265	9309.968	4623.867	13933.834
1997						
Assets						
Current assets	2295.798	<u>434.446</u>	<u>795.601</u>	<u>3525.845</u>	<u>1751.138</u>	<u>5276.983</u>
Fixed assets	3141.458	<u>110.624</u>	<u>244.859</u>	<u>3496.941</u>	<u>1736.783</u>	<u>5233.724</u>
Intangible, defer.			<u>23.029</u>	<u>23.029</u>	<u>11.438</u>	<u>34.467</u>
Other assets	<u>473.505</u>	<u>48.298</u>	<u>97.308</u>	<u>619.111</u>	<u>307.486</u>	<u>926.597</u>
Total assets	5910.761	593.368	<u>1160.797</u>	<u>7664.926</u>	<u>3806.845</u>	<u>11471.771</u>
Net fixed assets*				<u>2573.699</u>	<u>1278.248</u>	<u>3851.947</u>
Liabilities and equity						
Total liabilities	3831.502	462.134	<u>929.462</u>	<u>5223.098</u>	<u>2594.092</u>	<u>7817.190</u>
(Ent. bonds)						(52.102)
Equity	2046.904	131.234	<u>231.334</u>	<u>2409.472</u>	<u>1196.683</u>	<u>3606.155</u>
(Non-negotiable A-shares)						(1229.810)
						[569.022]
(Negotiable A-shares)						(485.608)
						[209.679]
(B-shares)						(37.504)
(H-, N-shares)						(72.571)
Other liabilities	<u>32.355</u>			<u>32.355</u>	<u>16.069</u>	<u>48.424</u>
Total	5910.761	593.368	<u>1160.796</u>	<u>7664.925</u>	<u>3806.845</u>	<u>11471.770</u>
1996						
Assets						
Current assets	2067.094	<u>391.358</u>	<u>775.458</u>	<u>3233.910</u>	<u>1606.147</u>	<u>4840.057</u>
Fixed assets	2832.809	<u>114.509</u>	<u>229.740</u>	<u>3177.058</u>	<u>1577.911</u>	<u>4754.969</u>

Intangible, defer.			<u>18.168</u>	<u>18.168</u>	<u>9.023</u>	<u>27.191</u>
Other assets	<u>375.800</u>	<u>29.696</u>	<u>82.255</u>	<u>487.751</u>	<u>242.245</u>	<u>729.996</u>
Total assets	<u>5275.703</u>	<u>535.563</u>	<u>1105.621</u>	<u>6916.887</u>	<u>3435.326</u>	<u>10352.213</u>
Net fixed assets*	<u>1981.36</u>	<u>91.64</u>	<u>265.27</u>	<u>2338.270</u>	<u>1161.320</u>	<u>3499.590</u>

Liabilities and equity

Total liabilities	<u>3435.085</u>	<u>416.827</u>	<u>884.627</u>	<u>4736.539</u>	<u>2352.439</u>	<u>7088.978</u>
(Ent. bonds)						<u>(59.773)</u>
Equity	<u>1840.618</u>	<u>118.736</u>	<u>220.995</u>	<u>2180.349</u>	<u>1082.887</u>	<u>3263.236</u>
(Non-negotiable A-shares)						<u>(693.454)</u> <u>[284.091]</u>
(Negotiable A-shares)						<u>(251.401)</u> <u>[100.103]</u>
(B-shares)						<u>(36.468)</u>
(H-, N-shares)						<u>(39.382)</u>
Total	<u>5275.703</u>	<u>535.563</u>	<u>1105.622</u>	<u>6916.888</u>	<u>3435.326</u>	<u>10352.214</u>

1995

Assets

Current assets	<u>1910.642</u>	<u>321.420</u>	<u>741.262</u>	<u>2973.324</u>	<u>1473.677</u>	<u>4447.001</u>
Fixed assets	<u>2541.361</u>	<u>88.605</u>	<u>193.911</u>	<u>2823.877</u>	<u>1399.607</u>	<u>4223.484</u>
Intangible, defer.			<u>14.083</u>	<u>14.083</u>	<u>6.980</u>	<u>21.063</u>
Other assets	<u>295.203</u>	<u>24.243</u>	<u>75.724</u>	<u>395.170</u>	<u>195.859</u>	<u>591.029</u>
Total assets	<u>4747.206</u>	<u>434.268</u>	<u>1024.980</u>	<u>6206.454</u>	<u>3076.123</u>	<u>9282.577</u>
Net fixed assets*	<u>1731.57</u>	<u>78.06</u>	<u>163.10</u>	<u>1972.730</u>	<u>977.750</u>	<u>2950.480</u>

Liabilities and equity

Total liabilities	<u>3124.197</u>	<u>336.869</u>	<u>814.992</u>	<u>4276.058</u>	<u>2119.355</u>	<u>6395.413</u>
(Ent. bonds)						<u>(64.661)</u>
Equity	<u>1623.009</u>	<u>96.518</u>	<u>209.988</u>	<u>1929.515</u>	<u>956.331</u>	<u>2885.846</u>
(Non-negotiable A-shares)						<u>(251.963)</u> <u>[161.337]</u>
(Negotiable A-shares)						<u>(79.094)</u> <u>[54.992]</u>
(B-shares)						<u>(16.370)</u>
(H-, N-shares)						<u>(28.112)</u>
Other liabilities		<u>0.881</u>		<u>0.881</u>	<u>0.437</u>	<u>1.318</u>
Total	<u>4747.206</u>	<u>434.268</u>	<u>1024.980</u>	<u>6206.454</u>	<u>3076.123</u>	<u>9282.577</u>

1990

Assets

Current assets	<u>790.074</u>	<u>144.413</u>	<u>283.218</u>	<u>1217.705</u>	<u>475.972</u>	<u>1693.677</u>
Fixed assets	<u>808.831</u>	<u>38.233</u>	<u>81.600</u>	<u>928.664</u>	<u>362.993</u>	<u>1291.657</u>
Intangible, defer.			<u>6.713</u>	<u>6.713</u>	<u>2.624</u>	<u>9.337</u>
Other assets			<u>31.155</u>	<u>31.155</u>	<u>12.178</u>	<u>43.333</u>
Total assets	<u>1598.905</u>	<u>182.646</u>	<u>402.686</u>	<u>2184.237</u>	<u>853.766</u>	<u>3038.003</u>
Net fixed assets*	<u>670.61</u>	<u>26.86</u>	<u>81.60</u>	<u>779.070</u>	<u>304.520</u>	<u>1083.590</u>

Liabilities and equity

Total liabilities	<u>1046.036</u>	<u>141.947</u>	<u>321.606</u>	<u>1509.589</u>	<u>590.063</u>	<u>2099.652</u>
(Ent. bonds)						<u>(19.544)</u>
Equity	<u>552.869</u>	<u>40.699</u>	<u>81.080</u>	<u>674.648</u>	<u>263.704</u>	<u>938.352</u>
Total	<u>1598.905</u>	<u>182.646</u>	<u>402.686</u>	<u>2184.237</u>	<u>853.766</u>	<u>3038.003</u>

1985

Assets						
Current assets	<u>320.605</u>	<u>76.748</u>	<u>130.676</u>	<u>528.029</u>	<u>197.350</u>	<u>725.379</u>
Fixed assets	<u>398.080</u>	<u>20.319</u>	<u>37.650</u>	<u>456.049</u>	<u>170.447</u>	<u>626.496</u>
Intangible, defer.			<u>3.097</u>	<u>3.097</u>	<u>1.157</u>	<u>4.254</u>
Other assets			<u>14.375</u>	<u>14.375</u>	<u>5.373</u>	<u>19.748</u>
Total assets	<u>718.685</u>	<u>97.067</u>	<u>185.798</u>	<u>1001.550</u>	<u>374.327</u>	<u>1375.877</u>
Net fixed assets*	<u>342.87</u>	<u>16.78</u>	<u>37.65</u>	<u>397.300</u>	<u>148.490</u>	<u>545.790</u>
Liabilities and equity						
Total liabilities	<u>470.178</u>	<u>75.438</u>	<u>148.388</u>	<u>694.004</u>	<u>259.382</u>	<u>953.386</u>
Equity	<u>248.507</u>	<u>21.629</u>	<u>37.410</u>	<u>307.546</u>	<u>114.945</u>	<u>422.491</u>
Total	<u>718.685</u>	<u>97.067</u>	<u>185.798</u>	<u>1001.550</u>	<u>374.327</u>	<u>1375.877</u>
1980						
Assets						
Current assets	<u>224.303</u>	<u>46.333</u>	<u>102.979</u>	<u>373.615</u>	<u>126.660</u>	<u>500.275</u>
Fixed assets	<u>252.800</u>	<u>12.266</u>	<u>29.670</u>	<u>294.736</u>	<u>99.919</u>	<u>394.655</u>
Intangible, defer.			<u>2.441</u>	<u>2.441</u>	<u>0.828</u>	<u>3.269</u>
Other assets			<u>11.328</u>	<u>11.328</u>	<u>3.840</u>	<u>15.168</u>
Total assets	<u>477.103</u>	<u>58.599</u>	<u>146.418</u>	<u>682.120</u>	<u>231.247</u>	<u>913.367</u>
Net fixed assets*	<u>236.65</u>	<u>10.13</u>	<u>29.67</u>	<u>276.450</u>	<u>93.720</u>	<u>370.170</u>
Liabilities and equity						
Total liabilities	<u>312131</u>	<u>45.542</u>	<u>116.937</u>	<u>474610</u>	<u>160.899</u>	<u>635.509</u>
Equity	<u>164.972</u>	<u>13.058</u>	<u>29.481</u>	<u>207.511</u>	<u>70.349</u>	<u>277.860</u>
Total	<u>477.103</u>	<u>58.899</u>	<u>146.418</u>	<u>682.420</u>	<u>231.349</u>	<u>913.769</u>
1978						
Assets						
Current assets	<u>206.844</u>	<u>23.555</u>	<u>79.898</u>	<u>310.297</u>	<u>104.244</u>	<u>414.541</u>
Fixed assets	<u>222.570</u>	<u>6.236</u>	<u>23.020</u>	<u>251.826</u>	<u>84.601</u>	<u>336.427</u>
Intangible, defer.			<u>1.894</u>	<u>1.894</u>	<u>0.636</u>	<u>2.530</u>
Other assets			<u>8.789</u>	<u>8.789</u>	<u>2.953</u>	<u>11.742</u>
Total assets	<u>429.414</u>	<u>29.791</u>	<u>113.601</u>	<u>572.806</u>	<u>192.433</u>	<u>765.239</u>
Net fixed assets*	<u>211.45</u>	<u>5.15</u>	<u>23.02</u>	<u>239.620</u>	<u>80.500</u>	<u>320.120</u>
Liabilities and equity						
Total liabilities	<u>280.931</u>	<u>23.153</u>	<u>90.728</u>	<u>394.812</u>	<u>132.637</u>	<u>527.449</u>
Equity	<u>148.483</u>	<u>6.638</u>	<u>22.873</u>	<u>177.994</u>	<u>59.797</u>	<u>237.791</u>
Total	<u>429.414</u>	<u>29.791</u>	<u>113.601</u>	<u>572.806</u>	<u>192.433</u>	<u>765.239</u>

* Net fixed assets according to Finance Ministry (FM) statistics.

Underlined data was derived through calculations.

Definitions:

Current assets or working capital (*liudong zichan*) comprise currency and deposits, short-term investment, payments to receive, and inventories.

Fixed assets (*guding zichan (heji)*) comprise fixed assets at original purchase value minus cumulative depreciation, the value of investment projects under construction, minus fixed assets which are revalued or are lost but have not yet been written off.

Net fixed assets (*guding zichan jingzhi*) in the FM statistics denote the year-end net value of fixed assets.

Equity (*suoyouzhe quanyi*) comprises paid-in capital and reserves.

Industry

All data on state-owned industrial enterprises cover the state-owned industrial enterprises with independent accounting system only. These produced 95.97% of total Gross Output

Value of Industry by state-owned industrial enterprises in 1997 (ZGTJNJ 1998, 435, 448), and 96.44% in 1978 (GGKF 145f).

Fixed assets of state-owned industrial enterprises with independent accounting system as given in the industrial statistics differ from the net fixed assets given in the FM statistics (both in ZGTJNJ 1997) for all state-owned industrial enterprises, presumably primarily because the former includes fixed assets still under construction (ZGTJNJ does not define the FM statistics).

In 1997 and 1998, balance sheet data are available for all items except for the category "other assets" and "other liabilities," which are residuals.

In 1996 and 1995 balance sheet data are available for all items except for the category "other assets" and "total liabilities," which are residuals.

In 1978 through 1990 (year-end) current assets are constructed as a multiple of average annual "fixed-quota current assets." The only year for which both data points are available is 1992; the first is 1.9750 times the latter (ZGTJNJ 1993, 427 and 430). Equity and total liabilities were constructed by assuming that their relative shares remained constant throughout all years with equity being equivalent to 0.3457796 of total assets (the shares in 1995 through 1997 were 0.3418872, 0.3491505, and 0.3463012). This is likely to underestimate equity in the early reform years and thus to yield an underestimate of state sector net worth in the consolidated balance sheet; this in turn implies that the deterioration in state sector net worth has been even more dramatic than outlined in the paper.

A major statistical break occurs in 1998. Up to and including 1997, data on industrial SOEs excluded both state-controlled share-holding companies as well as industrial SOEs with dependent accounting system and other non-enterprise industrial state-owned units. Since 1998 these are all included. Furthermore, the number of industrial SOEs almost halved between 1997 and 1998 due to a re-definition of what constitutes an independent SOE vs. a factory within a state-owned conglomerate; at the same time balance sheet data, in particular asset data, appear to have undergone significant adjustments.

Construction

In 1998, 1997, 1996 and 1995 the share of state-owned enterprises in total fixed assets of all construction enterprises (0.5299520, 0.5601625; 0.5794349; 0.6463628) was used to derive current and fixed assets of state-owned enterprises from the data for all construction enterprises; other assets then are the residual given total assets of state-owned enterprises.

For 1990 only fixed asset data are available. The share of state-owned enterprises current assets was derived as multiple of fixed assets; total assets are the sum of these two items. The multiplication factor is the mean multiplier of 3.777173 for the years 1993 (the first year, for which the data are available) through 1997 (ZGTJNJ 1994, 443f; ZGTJNJ 1995, 446f); the data shows no trend (a maximum of 4.109786 was obtained in 1994, and a minimum of 3.417705 in 1996). Equity and total liabilities data are obtained by applying the respective mean shares in total assets in the years 1993 through 1997 (0.222829) to total assets (the highest share occurred in 1993 at 0.248990 and the lowest in 1994 at 0.200031; ZGTJNJ 1994, 444, 446; ZGTJNJ 1995, 447, 449).

1978 through 1985 total assets were constructed by multiplying net fixed assets as given by the FM statistics with 1.210907, the mean ratio of net fixed assets in the construction statistics to net fixed assets in the FM statistics in the years 1993 through 1996 (the maximum ratio occurred in 1996 at 1.249553 and the lowest ratio in 1995 at 1.135088; ZGTJNJ 1998, 35). Current assets were then constructed as in 1990, and total assets were calculated as the sum of current and fixed assets. Equity and total liabilities finally were derived as in 1990.

Commerce

All data on the commercial sector (wholesale and retail sales, catering) up to and including 1997 are limited to large and medium-sized enterprises in wholesale and retail sales trade. This implies that state-owned commerce could in fact be almost twice as large, but more detailed data are not available. In 1997, state-owned large and medium-sized enterprises

in the wholesale and retail sales trade accounted for 64.45% of total “capital” (*zibenjin*) of large and medium-sized enterprises in the wholesale and retail sales trade (ZGTJNJ 1998, 607). At the same time, total sales of all large and medium-sized enterprises in the wholesale and retail sales trade were equivalent to 91.42% of total sales by all state-owned wholesale and retail sales trade (by all enterprise sizes; ZGTJNJ 1998, 601 and 610). In addition, the number of employees in state-owned catering was equivalent to 6.29% of the number of employees in state-owned wholesale and retail sales (ZGTJNJ 1998, 581).

In 1997, 1996, and 1995 all balance sheet data pertains to large and medium-sized state-owned wholesale and retail sales trade enterprises with the state-owned share in the various balance sheet items determined by the state-owned share in capital (0.6444971; 0.6748842; 0.6914506).

In 1996 net fixed assets thus derived in the commercial statistics were below net fixed assets in the FM statistics, in 1995, on the other hand, above. With no further data available before the year 1995, in the following net fixed assets are taken from the FM statistics and all other balance sheet items derived in the same proportion as on average in the years 1995 through 1997. (In 1995 through 1997 individual balance sheet items were approximately within a 5% range of the particular mean.)

In 1998, the data cover only “above-designated-size” (*xian’e yishang*) state-owned wholesale and retail trade; their total assets accounted for 65.09% of total assets of all “above-designated-size” wholesale and retail trade, which in turn accounted for 41.22% of total sales in all wholesale and retail units. Other assets were calculated as the difference between total assets on the one hand and current and fixed assets on the other hand. Equity is the residual after subtracting short- and long-term liabilities from total assets.

Other sectors

For all other sectors, only the FM net value of fixed assets data are available. The other sectors consist of agriculture (with a net value of fixed assets of 104.55b yuan in 1996, the most recent year for which data are available), transportation, postal and telecommunications services (769.66b yuan), urban public utilities (88.82b yuan), and an unaccounted for rest (198.29b yuan, to make up the total of 1161.32b yuan). It is assumed that actual net fixed assets in the other sectors exceed net fixed assets in the FM statistics by as much as they do in the sectors industry, construction, and commerce together (and that in 1998 and 1997 the ratio is the same as in 1996). It is further assumed that all balance sheet items in the other sectors are in the same proportion to net fixed assets as in the sectors industry, construction, and commerce together. It is finally assumed, that the ratio of other sector FM net fixed assets to FM net fixed assets in industry, construction and commerce in 1998 and 1997 is the same as in 1996.

If net fixed assets of the residual sector (198.29b yuan in 1996) were to include the net fixed assets of the state banking system, then treating the state banking system also separately implies double-counting. But with the residual sector accounting for only 5.67% of total state-owned enterprise net fixed assets in 1996, and the state banking system being at best a sub-category of this residual sector, the effect of double-counting should be minimal. (In the balance sheet of the financial institutions no fixed assets at all are listed; presumably they are included in the net category “others.”)

Equity

Data on A-shares in parentheses are at market value, data in square brackets represent capital raised. The two stock markets provide data on market capitalization and the number of shares issued, while the China Securities Commission provides data on capital raised as well as the number of shares issued. The number of shares issued differs slightly between the two sources. In the table here, market value data are according to the stock market information. The value of capital raised is derived by multiplying the number of shares issued according to stock market information with the average multiple of capital raised per share according to the China Securities Commission information. B-share data are at market capitalization and

assumed to be all negotiable (there appears to be a non-negotiable part accounting for 7% of the total in 1997), the market capitalization data are approximately equal to capital raised. H- and N-share data reflects capital raised. A-shares in 1990 of a face value (and capital raised) of 4.590b yuan are ignored.

In deriving the consolidated balance sheet, all negotiable A-shares are assumed to be held by households. All other shares, which are not publicly traded in the stock exchange, are held by government units, legal persons (stock companies, non-bank financial institutions, and SOEs that have at least one non-state owner), and employees (less than 1% of market capitalization). Almost all of these non-negotiable shares are held by legal persons, which are assumed to be state-owned enterprises. (In terms of the consolidated balance sheet, all that matters is whether they are held by some state-owned unit or not.)

Sources:

Net fixed assets according to the FM statistics: ZGTJNJ 1998, 35.

Shares and enterprise bonds: ZGZQQHTJNJ 1998, 10f, 27 and 32f.; ZGZQQYTJNJ 2000, 23, 40f, 53f.

Industry

1998: ZGTJNJ 1999, 433, 436.

1997: ZGTJNJ 1998, 449f.

1996: ZGTJNJ 1997, 429f.

1995: ZGTJNJ 1996, 419f.

1978-1990: ZGTJNJ 1991, 410.

Construction

1998: ZGTJNJ 1998, 476.

1997: ZGTJNJ 1998, 511f, 514f.

1996: ZGTJNJ 1997, 485f, 488f.

1995: ZGTJNJ 1996, 479f, 482f.

1990: ZGTJNJ 1991, 559.

Commerce

1998: ZGTJNJ 1999, 554.

1997: ZGTJNJ 1998, 607-9.

1996: ZGTJNJ 1997, 575-7.

1995: ZGTJNJ 1996, 566-8.

Table 3. Balance Sheet of Government (b yuan)

	1978	1980	1985	1990	1995	1996	1997	1998
Assets								
Deposits at financial institutions								
by government	18.740	16.450	36.840	38.040	100.320	127.100	157.240	218.790
by administrative units	15.980	22.950	32.580	61.480	89.980	94.770	85.860	128.540
Equity of								
industrial SOEs	148.483	164.972	248.507	552.869	1623.009	1840.618	2046.904	2675.922
non-industrial SOEs	89.308	112.888	173.984	385.483	1262.837	1422.618	1559.251	1869.775
- Non-negotiable A-shares					-251.963 [161.337]	-693.454 [284.091]	-1229.810 [569.022]	-1374.928 [779.129]
- Negotiable A-shares					-79.094 [54.992]	-251.401 [100.103]	-485.608 [209.679]	-555.002 [296.148]
- B-shares					-16.370	-39.382	-37.504	-20.635
- N- and H-shares					-28.112	-36.468	-72.571	-76.366
financial institutions	42.190	51.500	90.040	160.720	339.490	392.420	466.180	583.790
Real estate	?	?	?	?	?	?	?	?
Roads and waterways	?	?	?	?	?	?	?	?
Other government assets	?	?	?	?	?	?	?	?
Total	314.701	368.760	581.951	1198.592	3040.097 [3154.825]	2856.821 [3417.482]	2489.942 [3426.659]	3449.886 [4304.539]
Liabilities								
Domestic government debt								
to households: government bonds		0	23.721	67.766	303.669	414.560	533.215	765.813
to households: state inv. company bonds				14.868	11.911	11.911		
to (state-owned) enterprises				7.552	6.662	8.389	11.024	
to financial institutions				13.716	19.699	13.194	6.654	
International government debt (in RMB)			5.601	69.093	244.657	265.745	298.441	332.376
Bank loans	0	17.020	27.510	80.100	158.210	158.210	158.210	158.210
Net worth	314.701	351.740	525.119	945.497	2295.289 [2410.017]	1984.812 [2545.473]	1482.398 [2419.115]	2193.487 [3048.14]
Total	314.701	368.760	581.951	1198.592	3040.097 [3154.825]	2856.821 [3417.482]	2489.942 [3426.659]	3449.886 [4304.539]

A-shares are valued at market capitalization. [The value in square brackets reflects capital raised.]

Following the definitions in ZGZQQHTJNJ 1998, 28f, the various types of bonds are handled as follows. Domestic government debt to households consists of treasury bills (*guokuquan*), state construction bonds (*guojia jianshe zhaiquan*), state key construction bonds (*guojia zhongdian jianshe zhaiquan*), and price index bonds (*baozhi gongzhai*). Domestic government debt to—presumably state-owned—enterprises consists of special bonds (*tezhong guozhai*) and special purchase bonds (*dingxiang zhaiquan*). Domestic government debt to financial institutions consists of financial bonds (*caizheng zhengquan*).

Policy financial bonds (*zhengcexing jinrongzhai*), issued by the three development banks, are presumably all sold to other financial institutions, and cancel out in the balance sheet of the financial institutions. (To judge by the balance sheet of the financial institutions, and given the volume of these bonds, they have already been consolidated out in 1997 but not before or after.) Other financial bonds (*qita jinrong zhaiquan*) are presumably sold to state-owned enterprises. Enterprise bonds (*qiyezhai*) are presumably sold to households. The state investment company bonds (*guojia touzi gongsi zhaiquan*) are issued by the state investment companies under the state planning commission and are thus treated as domestic government debt; these bonds are assumed to be sold to households.

ZGZQQHTJNJ gives no data on state investment bonds in 1997 and 1998 and does not show that these bonds have been redeemed (as it usually does). Similarly, government debt to state-owned enterprises and financial institutions disappears in 1998 without it being shown that they have been redeemed. In the table, the values are assumed to be zero, potentially underestimating government obligations, and thus overestimating government net worth.

Total international debt of 130.96b USD at the end of the year 1997 consisted of sovereign debt (27.49%), financial institutions' debt (32.49%), foreign-funded enterprise debt (28.55%), leasing company debt (1.38%) and state enterprise debt (10.15%) (*China News Digest* 6 April 1998). For other years no such break-down is available; the 1997 government share of 27.49% is therefore used to derive the government's international debt. This is likely to underestimate the government's foreign debt in earlier years. The estimated USD government debt is exchanged into RMB at the average annual exchange rate. The exchange rate for 1985 is the arithmetic mean of end-quarter exchange rates.

Total assets and government net worth are calculated as residuals.

Sources:

Market capitalization of non-negotiable and negotiable shares: ZGZQQHTJNJ 1998, 2, 67. ZGZQQHTJNJ 2000, 53f.

Deposits at financial institutions, equity of financial institutions, bank loans from financial institutions: see balance sheet of financial institutions.

Other equity items see balance sheet of state-owned enterprises.

Domestic government debt: ZGZQQHTJNJ 1998, 8-11; ZGZQQHTJNJ 2000, 20-23; ZGTJNJ 1999, 285.

International government debt: 1998: ZGTJNJ 1999, 285; 1995, 1996, 1997: ZGTJNJ 1998, 292; 1990: ZGTJNJ 1995, 225; 1980, 1985: ZGJRNJ 1986, II-35.

Exchange rates: 1998: ZGJRNJ 1999, 381; 1997, 1996, 1995: ZGJRNJ 1998, 527; 1990: ZGJRNJ 1991, 92; 1985: ZGJRNJ 1986, II-37.

Table 4. Balance Sheet of Households (b yuan)

	1978	1980	1985	1990	1995	1996	1997	1998
Assets								
Currency	17.384	28.523	81.344	215.519	642.652	717.363	829.474	913.142
Deposits	21.060	39.940	162.260	711.980	2966.220	3852.090	4627.980	5340.750
A-shares					79.094 [54.992]	251.401 [100.103]	485.608 [209.679]	555.002 [296.148]
Enterprise bonds				19.544	64.661	59.773	52.102	67.693
Domestic government bonds			23.721	67.766	303.669	414.560	533.215	765.813
State investment company bonds				14.868	11.911	11.911		
Productive assets	?	?	?	?	?	?	?	?
Non-productive assets (consumer goods)	?	?	?	?	?	?	?	?
Real estate	?	?	?	?	?	?	?	?
Total	38.444	68.463	267.325	1029.68	4068.207 [4044.105]	5307.098 [5155.800]	6528.379 [6252.450]	7938.548 [7383.546]
Liabilities								
Bank loans								
private industrial and commercial enterprises		0.02	1.07	4.02	19.62	27.98	38.66	47.16
(agricultural households)	(1.12)	(1.59)	(19.42)	(51.82)				
(agr. collectives, township and village ent.)	(3.39)	(6.56)	(20.58)	(89.32)				
("agricultural" loans)	(16.07)	(25.75)	(81.66)	(241.28)	(301.91)	(712.30)	(835.04)	(1002.42)
Net worth	38.444	68.443	266.255	1025.66	4048.587 [4024.485]	5279.118 [5087.82]	6489.719 [6213.79]	7891.388 [7336.386]
Total	38.444	68.463	267.325	1029.68	4068.207 [4044.105]	5307.098 [5155.800]	6528.379 [6252.450]	7938.548 [7383.546]

A-shares are valued at market capitalization. [The value in square brackets reflects capital raised.]

Households hold 81.5% of total currency in circulation. According to survey results, in 1978 the ratio was 81.99 and in 1986 81.57% (Quanguo 1988, 28, 501). In 1991 the ratio was 81.51% (Xie 1992).

Bank loans to agricultural households consist of RCC loans to agricultural households only. All other loans extended by RCCs fall into the categories “loans to agricultural collectives” and “loans to township and village enterprises.” Lending by all other financial institutions does not distinguish accordingly but only offers “agricultural loans.” “Agricultural loans” after 1985 comprises such loans by all financial institutions (including RCCs). The 1990 data in these statistics (ZGJRNJ 1997, 464) approximately match the sum of agricultural loans by state banks plus all loans extended by RCCs (to agricultural collectives, township and village enterprises, and farm households) in China Financial Statistics (1952-1991). Agricultural loans in 1978, 1980, and 1985 are constructed accordingly. “Loans to agriculture” thus in fact comprise all loans extended in the countryside by any financial institution, not just the loans to agricultural households. Since no data on lending to agricultural households are available for the years after 1990, all loans to agriculture are assumed to be to state-owned agriculture; similarly, all agricultural deposits are assumed to have been made by state-owned agriculture.

Households hold all negotiable A-shares in Shanghai and Shenzhen. Households hold the particular types of domestic government debt as explained with the balance sheet of the government. Households hold all enterprise bonds.

Total assets and net worth are calculated as residuals.

Savings through insurance companies are ignored throughout since the savings vs. the insurance element of premium payments cannot be identified. In 1995 (1996) the following premium payments were made: pension insurance (*yanglao jinxian*) 3.398b yuan (3.653b yuan) and “simple personal insurance” (*jianyi renshen xian*) 9.464b yuan (14.067b yuan); in 1997 pension insurance premiums amounted to 8.862b yuan, health and life insurance premiums as well as savings business to 26.424b yuan. In 1998 only premiums on life, health, and accident insurance are available and given as 66.861b yuan, 2.811b yuan, and 5.35b yuan; to judge by the relative size, life insurance is likely to include pension insurance. (ZGTJNJ 1997, 629; ZGTJNJ 1998, 673; ZGTJNJ 1999, 630) If insurance premiums were considered as part of household savings, then state net worth in the consolidated balance sheet would be correspondingly smaller. This is the case because all insurance companies in China are state-owned and presumably included in the state-owned enterprise balance sheet (as part of the residual sector).

Since insurance companies hold few fixed assets and the asset and liability values of the residual sector in the SOE balance sheet were calculated based on the relationship to fixed assets that hold for industry, construction and commerce, the SOE balance sheet is unlikely to properly reflect the financial assets and liabilities of the insurance companies. In as far as insurance companies’ liabilities are to other state-owned units and their assets are held as deposits at banks or in form of legal person non-negotiable A-shares, ignoring the insurance companies has no impact on the consolidated balance sheet. Only the liabilities to households (household claims on the state sector) are lost; no data are available. These state sector liabilities are likely to be small compared to other household claims on the state sector; if they were included in the consolidated balance sheet they would reduce state net worth..

Sources:

Currency with households: 1978, 1980, 1985: Quanguo 1988, 28, 65, 501. Loans to agricultural collectives and township and village enterprises, loans to agricultural households: China Financial Statistics (1952-1991), 62.

For all other data see the other balance sheets.

Table 5. Consolidated Balance Sheet of Financial Institutions, State-owned Enterprises and Government (b yuan)

Assets					Liabilities				
	1978	1980	1985	1990		1978	1980	1985	1990
Items which should largely be consolidated but cannot, due to items being differently aggregated in different balance sheets									
<i>Financial institutions</i>					<i>Financial institutions</i>				
Loans to SOEs	184.530	241.340	598.430	1666.340	SOE deposits	57.200	84.160	196.100	492.050
Securities	0	0	0	2.490	Financial bonds	0	0	0.820	10.830
Other assets	0	2.800	12.150	0	“Others”	10.810	12.360	34.130	81.880
<i>State-owned enterprises</i>					Non-househ. currency	3.816	6.097	17.436	48.921
Current and other assets	428.813	518.712	749.381	1746.347	<i>State-owned enterprises</i>				
					Total liabilities	527.449	635.509	953.386	2099.652
					- Ent. bonds to househ.	0	0	0	-19.544
					Other liabilities	0	0	0	0
					Non-negot. A-shares	0	0	0	0
					<i>Government</i>				
					Debt to ent. and fin. in.	0	0	0	21.268
					<i>Balance</i>	14.068	24.726	158.089	680.120
<i>Balance</i>	14.068	24.726	158.089	680.120	<i>Foreigners</i>				
<i>Financial institutions</i>					International gov. debt	0	0	5.601	69.093
Gold	1.220	1.220	1.200	1.200	B-, H-, N-shares	0	0	0	0
Net claims, intl. fin. inst.	0	0.420	1.880	7.330	<i>Domestic households</i>				
Foreign exchange	1.430	-0.840	9.310	59.940	Deposits	21.060	39.940	162.260	711.980
Loans to private ent.	0	0.020	1.070	4.020	Currency	17.384	28.523	81.344	215.519
<i>State-owned enterprises</i>					Domestic gov. bonds	0	0	23.721	67.766
Fixed assets	336.427	394.655	626.496	1291.657	State inv. comp. bonds	0	0	0	14.868
<i>Real estate</i>	?	?	?	?	Negotiable A-shares	0	0	0	0
<i>Roads and waterways</i>	?	?	?	?	Enterprise bonds	0	0	0	19.544
<i>Other government assets</i>	?	?	?	?	<i>State net worth</i>	314.701	351.738	525.119	945.497
Total	353.145	420.201	798.045	2044.270	Total	353.145	420.201	798.045	2044.270

Table 5 cont.

Assets				Liabilities			
	1995	1996	1997		1995	1996	1997
Items which should largely be consolidated but cannot, due to items being differently aggregated in different balance sheets							
<i>Financial institutions</i>				<i>Financial institutions</i>			
Loans to SOEs	4719.660	5688.790	7263.660	SOE deposits	1915.180	2384.650	3178.860
Securities	316.690	410.420	367.170	Financial bonds	168.360	247.710	2.990
Other assets	0	0	0	“Others”	-457.980	-709.860	-327.460
<i>State-owned enterprises</i>				Non-household currency	145.878	162.837	188.286
Current and other assets	5059.093	5597.244	6238.047	<i>State-owned enterprises:</i>			
				Total liabilities	6395.413	7088.978	7817.190
				- Ent. bonds to househ.	-64.661	-59.773	-52.102
				Other liabilities	1.318	0	48.424
				Non-negotiable A-shares	251.963 [161.337]	693.454 [284.091]	1229.810 [569.022]
				<i>Government</i>			
				Debt to ent. and fin. inst.	26.361	21.583	17.678
				<i>Balance</i>	1713.611 [1804.237]	1866.875 [2276.238]	1765.201 [2425.989]

<i>Balance</i>	1713.611 [1804.237]	1866.875 [2276.238]	1765.201 [2425.989]	<i>Foreigners</i>			
<i>Financial institutions</i>				International gov. debt	244.657	265.745	298.441
Gold	1.200	1.200	1.200	B-shares	16.370	39.382	37.504
Net claims on intl. fin. in.	17.270	24.610	33.790	H- and N-shares	28.112	36.468	72.571
Foreign exchange	677.450	957.870	1346.720	<i>Domestic households</i>			
Loans to private ent.	19.620	27.980	38.660	Deposits	2966.220	3852.090	4627.980

<i>State-owned enterprises</i>				Currency	642.652	717.363	829.474
Fixed assets	4223.484	4754.969	5233.724	Domestic gov. debt	303.669	414.560	533.215
<i>Real estate</i>	?	?	?	State inv. comp. bonds	11.911	11.911	0
<i>Roads and waterways</i>	?	?	?	Negotiable A-shares	79.094	251.401	485.608
					[54.992]	[100.103]	[209.679]
<i>Other government assets</i>	?	?	?	Enterprise bonds	64.661	59.773	52.102
				<i>State net worth</i>	2295.289	1984.812	1482.398
					[2410.017]	[2545.473]	[2419.115]
Total	6652.635	7633.504	8419.295	Total	6652.635	7633.504	8419.295
	[6743.261]	[8042.867]	[9080.083]		[6743.261]	[8042.867]	[9080.083]

Table 5 cont.

Assets		Liabilities	
	1998		1998
Items which should largely be consolidated but cannot, due to items being differently aggregated in different balance sheets			
<i>Financial institutions</i>		<i>Financial institutions</i>	
Loans to SOEs	8356.500	SOE deposits	3632.960
Securities	811.22	Financial bonds	5.620
Other assets	0	“Others”	-255.000
<i>State-owned enterprises</i>		Non-household currency	207.278
Current and other assets	7582.579	<i>State-owned enterprises:</i>	
		Total liabilities	9326.973
		- Ent. bonds to househ.	-67.693
		Other liabilities	61.164
		Non-negotiable A-shares	1374.928 [779.125]
		<i>Government</i>	
		Debt to ent. and fin. inst.	0
		<i>Balance</i>	2464.069 [3059.872]
<i>Balance</i>	2464.069 [3059.872]	<i>Foreigners</i>	
<i>Financial institutions</i>		International gov. debt	332.376
Gold	1.200	B-shares	20.635
Net claims on intl. fin. in.	28.740	H- and N-shares	76.366
Foreign exchange	1372.83	<i>Domestic households</i>	
Loans to private ent.	47.160	Deposits	5340.750
<i>State-owned enterprises</i>		Currency	913.142
Fixed assets	6351.256	Domestic gov. debt	765.813
<i>Real estate</i>	?	State inv. comp. bonds	
<i>Roads and waterways</i>	?	Negotiable A-shares	555.002 [296.148]
<i>Other government assets</i>	?	Enterprise bonds	67.693
		<i>State net worth</i>	2193.478 [3048.135]
Total	10265.255 [10861.058]	Total	10265.255 [10861.058]

Explaining the development of state net worth between 1997 and 1998

State net worth between 1997 and 1998 appears to have increased by 47.97% if A-shares are valued at market capitalization [26.00% if A-shares are valued at capital raised], compared to a 25.31% [4.96%] drop between 1996 and 1997. Yet such a conclusion is not justified. The rise between 1997 and 1998 can be more than explained by three special factors. If these three factors are taken into account, state net worth fell in 1998.

First, much of the discrepancy is due to the valuation problem of A-shares (see below for details). In 1997, the volume of A-shares doubled compared to the previous year. With market valuation exceeding capital raised, state net worth decreased drastically (as assets were not adjusted in line with the higher valuation the market assigned to the SOEs' assets and to the claims of households on these assets). In 1998, new issues of A-shares increased the total capital raised through A-shares by less than 50%; the absolute increase remained slightly below the absolute increase of the previous year. Furthermore, the stock market slumped, reducing the market valuation across all A-shares and thus increasing the residual state net worth compared to previous years. At the end of 1998, the Shanghai Composite Index stood at 1146.70, down from 1194.10 at end-1997 (1995: 555.29, 1996: 917.01). The Shenzhen Composite Index at the end of 1998 stood at 343.85, down from 381.29 at end-1997 (1995: 113.24, 1996: 327.45). (ZGTJNJ 1999, 629) In 1999, both indices recovered and thereby will have reduced state net worth again (ZGZQQHTJNJ 2000, 39; the necessary year-end data are not (yet) available, only average annual values). If the market valuation of non-negotiable and negotiable A-shares relative to capital raised had remained unchanged between 1997 and 1998, state net worth would only have increased by 38.15% of the increase reported in the table (in terms of market valuation). In other words, 61.85% of the increase in state net worth might have to be solely attributed to changes in the market value of A-shares. (The technical issue of how to value A-shares is a standard and unavoidable accounting problem.)

A second item is what appears either a drastic re-valuation of SOE assets or a large equity injection in 1998. In 1997, current and other SOE assets increased 11.45% over 1996, while fixed assets increased 10.07%; liabilities and capital raised through A-shares rose correspondingly. The absolute increase in liabilities and capital raised through A-shares exceeded the absolute increase in assets by 4.6%, leading to a relative decrease in state net worth. In 1998, on the other hand, SOE assets increased by twice as much, namely current and other SOE assets by 21.55%, and fixed assets by 21.35%. The absolute increase in liabilities and capital raised fell 26.12% short of the absolute increase in assets. The shortfall in absolute terms is equal to 90.42% of the 1998 increase in state net worth. This difference between the increases in credits and debits cannot be due to a sudden enormous rise in profits or a direct non-share equity injection by the government (the only technically feasible explanations). Reported profits (before paying income taxes) were equivalent to only 7.39% of the rise in state net worth, and no evidence of any sudden equity injection can be found in the government budget. The only conclusion then is that SOE assets have been re-valued upwards by perhaps up to 10%; such a re-valuation induces an increase in state net worth by exactly the same absolute amount.

A third concern is that some government debt has not been included. The official statistical data on government debt outstanding at year-end 1998 are based on new government debt issues in 1998 of 322.877b yuan minus repayments of principal. However, the finance minister in his report to the National People's Congress on 6 March 1999 stated that in 1998 new government debt worth 389.1b yuan was issued (*Jinrong shibao* 19 March 1999, p. 3). If the difference of 66.223b yuan was issued to households, state net worth needs to be reduced correspondingly; 66.223b yuan are equivalent to 9.31% of the increase in state net worth between 1997 and 1998.

Together, these three special events account for almost twice the increase in state net worth in 1998 over 1997 (161.58% increase). If, apart from the stock market slump (which is a fact), SOE assets were indeed re-valued and government debt data were incomplete, this implies that state net worth would in the absence of these three effects have been reduced by one third (29.54%) between 1997 and 1998, rather than risen by 47.97%.

Valuation of SOE equity

A- and B-shares are enterprise shares traded on the Shanghai and Shenzhen stock exchanges since 1992. A-shares are held and traded by domestic citizens (negotiable A-shares) and domestic legal persons (non-negotiable A-shares); B-shares are held and traded by foreigners. H- and N-shares denote the shares of Chinese enterprises listed in Hong Kong and New York. In recent years a few non-SOEs have been allowed to list on the two stock exchanges; in the consolidated balance sheet all shares are viewed as having been issued by SOEs.

A-share values in the table are market capitalization values. The alternative would be to use the generally lower value of capital raised at the initial public offering, thus imputing an artificially low value on household claims. The difference only matters for the years since 1995, as no shares had been issued in 1990. B-shares are likewise valued at market capitalization. H- and N-shares are valued at the amount of capital raised due to a lack of market capitalization data; the difference is likely to be small as these shares were issued in more sophisticated markets. If A-shares are valued at the amount of capital raised at the initial public offering, then the value of the items “non-negotiable A-shares,” “balance,” “negotiable A-shares,” “state net worth,” and “balance sheet total” changes. The values based on capital raised are noted in square brackets.

Valuing A-shares at market capitalization has the following implication. The SOE issuing the shares only receives payments (assets) equivalent to capital raised, while the new equity claims are worth the amount of market capitalization to the purchaser. If the accounting value of total assets is maintained and equity held by outsiders is valued at (the higher) market capitalization, then the residual net worth is automatically reduced by exactly the amount by which market capitalization differs from capital raised. More than two thirds of the A-shares are held by legal persons (other state-owned units) and following the accounting regulations valued at purchasing price (“capital raised”). Assume all legal persons sell these shares on to other legal persons at the market price. The seller realizes the capital gain with a corresponding rise in the seller’s net worth. (All future trading at the same market price has no impact on net worth.) Following the sale of the two thirds of the A-shares, consolidated state net worth changes by an amount equivalent to market capitalization minus capital raised. In other words, the two thirds of A-shares sold to legal persons have no effect on state net worth. State net worth is reduced only in response to a difference between market capitalization and capital raised if the A-shares are held by households. Since market capitalization is likely to reflect a more accurate valuation of SOE assets than accounting values, this artificial reduction in state net worth may not be fully appropriate; rather, SOE asset values may have to be adjusted upwards. On the other hand, using “capital raised” instead of market capitalization to value A-shares seriously underestimates actual household claims on the state sector.

Non-state non-household sector

The consolidated balance sheet assumes that claims of the state sector against the non-state non-household sector of the economy (primarily urban collective-owned enterprises and township and village enterprises) are roughly balanced by the liabilities to this non-state non-household sector. If this were not the case, then the lower part of the consolidated balance sheet should also include an item net assets or net liabilities with respect to the non-state non-household sector. This item is likely to be very small, but the relevant SOE balance sheet data

are lacking. Detailed borrower statistics for the largest bank in China, the Industrial and Commercial Bank of China, are available for some provinces; these statistics suggest that these assets and liabilities are small, at most about 5% of the balance sheet total.

Loans to SOEs then were calculated as total loans minus loans to urban collective-owned enterprises (available as separate data point until 1996), minus loans to private industrial and commercial enterprises, and minus loans to foreign-funded enterprises. (Loans to the government are not part of “total loans.”) Deposits by SOEs were calculated as total deposits minus government deposits, minus deposits by administrative units, minus household deposits, minus deposits by urban collective-owned enterprises (at an amount equal to their loans, until 1996), minus deposits by foreign-funded enterprises (at an amount equal to their loans). Viewed the other way round, SOE loans consist of the loan categories industry, commerce, construction, investment, and agriculture. Some of the agricultural loans are likely to be to households, but the exact share is not available; to compensate, all agricultural deposits (in 1997 and 1998 an amount equivalent to half of all loans to agriculture) were also viewed as belonging to the state sector. In 1997 the volume of agricultural loans halved in comparison to 1996, and a new category lending to township and village enterprises appeared, making up for the shortfall in agricultural loans; however, there is no corresponding deposit item, with these enterprises’ deposits most likely included in the category ‘enterprise’ deposits. By treating agriculture and township and village enterprises as the state sector, both on the asset and liability side of the banking system’s balance sheet, only a small net liability to (or net claim on) the non-state non-household sector is likely to remain.

Sources:

The consolidated balance sheet was constructed from the four individual balance sheets (for all financial institutions, all state-owned enterprises, all governments, all households). The sources of these data are listed with the individual balance sheets, and comprise all items listed under “References” below.

Table 6. Balance Sheet Ratios (in %)

	1978	1980	1985	1990	1995	1996	1997	1998	1995*	1996*	1997*	1998*
Household claims / balance sheet total	10.89	16.29	33.50	50.37	61.15	69.52	77.54	74.45	59.97	64.10	68.86	67.98
State net worth / balance sheet total	89.11	83.71	65.80	46.25	34.50	26.00	17.61	21.37	35.74	31.65	26.64	28.06
Household claims / GDP	10.61	15.15	29.82	55.51	69.57	78.18	87.31	96.26	69.16	75.95	83.62	93.00
State net worth / GDP	86.84	77.86	58.58	50.98	39.25	29.24	19.83	27.63	41.21	37.50	32.35	38.39
State net worth / SOE loans	170.54	145.74	87.75	56.74	48.63	34.89	20.41	26.25	51.06	44.75	33.30	36.48
Household claims / (balance sheet total - 0.5 SOE loans)	14.74	22.86	53.59	85.02	94.77	110.82	136.36	125.53	92.26	99.18	114.76	110.49
Household claims / SOE fixed assets	11.43	17.35	42.67	79.72	96.32	111.61	124.74	120.33	95.75	108.43	119.46	116.25
State net worth / SOE fixed assets	93.54	89.13	83.82	73.20	54.35	41.74	28.32	34.54	57.06	53.53	46.22	47.99

* A-shares are valued at the amount of capital raised at the initial public offering. Also see notes to Table 5. The 1995 and 1997 ratios without star (*) are based on A-shares valued at market capitalization. Valuation is not an issue for the years up to and including 1990.

Household claims denote household claims on the state sector. Balance sheet total denotes the total (assets) of the consolidated balance sheet after consolidation, i.e., the total of the lower part in Table 5.

1998 data are highly misleading; see notes to Table 5.

Sources: Table 5; ZGTJNJ 1998, 55, and ZGTJNJ 1999, 55 (for the GDP data).

Additional notes to Table 3 in the paper

Labor productivity

Nationwide value-added for industrial SOEs with independent accounting system for the year 1990 as well as earlier years is not available. GGKF contains labor productivity data nationwide and for all provinces for most of the years 1978 through 1995, but this data, although explicitly labeled as value-added per staff and worker, on the nationwide level exactly matches labor productivity in ZGGYJJTJNJ 1998 (as well as in other sources) which is based on Gross Output Value and can be reconstructed from individual time series. The mislabeling carries over into some provinces, but not all. A counter-check using the recent data available in ZGTJNJ shows that labor productivity in GGKF (always explicitly defined as value-added per average number of staff and workers below the table) in some provinces is based on Gross Output Value for all years, in other provinces a statistical break occurs around 1992 when labor productivity plummets by 60 or 70% and presumably the switch from Gross Output Value to value-added occurs. The provinces selected here are the only ones that list 1995 labor productivity in GGKF equal to labor productivity derived from value-added data in ZGTJNJ and staff and worker data in GGKF; these provinces furthermore exhibit reasonable data for the early reform period and a time series without abrupt and major changes. The 1995 data for these provinces in the two sources exhibit very minor differences that could be due to statistical updating in whichever of the two sources is more recent.

Employment and wage data

Industrial employment and wage data are calculated by merging the three sectors (i) mining and quarrying, (ii) manufacturing, and (iii) electricity, gas and water production and supply into one sector “industry.” This follows the Chinese definition of industry.

Average annual income per labor

Average annual income per labor was derived as (average per capita urban income * urban population + average per capita rural income * rural population) / (total urban and rural employment). Both rural and urban income represents total income minus expenditures for productive purposes and minus taxes.

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