Talde 7-14 A PROJECTION OF FINANCIAL TRANSACTION AND SETTLEMENT TOWARD 2000 (PLAN A: Case in which Kyrgyz economy continue to be stagnent or dull in economy)

Column C			1993	1994	1995	9661	1997	1998	1999	200
Column C	(c) evant Data									
1,000 1,00	Population		4,450,000	4,410,000	4,373,000	4,332,000	4354,000	4375,000	4,397,000	4,419,00
total control of the	Labor force		2,303,000	2319,000	2335,000	2,352,000	2,373,000	2,394,000	2,415,000	2,438,00
Column C	Number of agricultural sector							*		
second (1,000,000,5cm) (1,000,	State enterprises		3	2/5	350	925	007	OKE !	201	R71
ticke () () () () () () () () () (Private farms	*.	13,000	15,000	000,71	19,500	22,800	008,72	31,100	7
Column C	Number of enterprises		17,867	19,200	007.57	000,87	33,600	0.200	45,800	20,00
Compared	State enterprises		4,822	000	21,100	2,500	20.00	85%	7,100	7. 4.
	Private enterprises		20,01	356	423	20747	503,00	366	100	10.
1000,000 Sum 1,000,000 Sum 25	Deposit by enterprises	(1,000,000 Som)	290	200	7 646	7.070	8 248	2008	200	0.10
1,000,000 Sept. 1,500	Balance per account	(HOS)	900	7,000	25.	7,70	0.570	1000	006.0	K'S
Second S	Deposit by individuals	(1,000,000 So田)	χ, ,	200	711	921	517	311	419	2
Second	Balance per account	(wox)	2011	0.67	20*1	000	40+17	1,037	71017	0,11
Second S	Number of commercial banks		7 8	A S	7 5	67 5	67.5	673	17	1 3
Second	Number of bank branches		966	200	200	000 131	000 010	000 of 6	000	2000
Section Sect	Number of deposit accounts		000'68	CCC,401	C2C,CCI	161,980	060,007	004,672	350,040	458.9
Activities accounts Activities Activit	Number of enterprise accounts		39,000	35.44	25.00	00,000	060	00,000	040,001	108,92
1,000 1,00	Number of individual accounts		0000	000/00 000/00	000°20	100,001	145,000	250,000	280,000	330,00
1,000 4,00	% to labor force		04.7	370	920	470	020	920 920	000 of	90
Section Sect	Those of salary payment		٠.					00000	0000	35
State Stat	1									
and baldwest/domostic promits and baldwest/domostic promits 7,495,000 4,375,000 5,690,000 7,652,250 8,814,313 13,200,519 16,419,243 and baldwest/domostic promits and baldwest/domostic promits 30% 34% 8,814,313 13,200,519 16,419,243 and baldwest/domostic promits and baldwest/domostic promits 4,375,000 4,375,000 5,690,000 7,550,00 2,500 12,00 14,247 <td></td> <td>yes, mi</td> <td></td> <td></td> <td></td> <td>200</td> <td>750</td> <td>1,125</td> <td>1,688</td> <td>2.5</td>		yes, mi				200	750	1,125	1,688	2.5
1985 1985	Number of card holders/domestic	pecole)					0	0	0	10,00
cost 7,493,000 4,775,000 5,690,000 7,627,00 13,200,19 16,192,23 cost	Average usage not month									0.0
1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1, 1,	otal number of payment transactions		7,493,000	4,375,000	2,690,000	7,652,250	8,814,313	13,200,519	16,419,263	21,025,6
1,200,000	Calculated growth rate(%)			Base	30%	K.	75% 15%	20%	24%	%87
tr. 7.493,000 4.375,000 5.887,500 7.393,79 8.502,813 9.333,94 9.914,279 1.006,000 2.000,000 2.410,000 2.40	Inter-bank market transactions				2,500	2,500	2,500	7,125	14250	23,75
1200,000 250,000 250,000 250,000 2,50,000 2	Customer-requested transfer		7,493,000	4,375,000	5,687,500	7,393,750	8,502,813	9,353,094	9,914,279	10,310,85
1,000,000 1,000,000 2,400,000 2,50	Growth rate(%)			Pase	% 	% R	15%	300	969	67 200
250,000 300,000 2,150,000 5,690,000 7,652,250 8,814,313 13,204,119 16,423,019 2,000 10,494 4.575,000 5,690,000 7,652,250 8,814,313 13,204,119 16,423,019 2,000 10,494 4.575,000 5,690,000 7,652,250 8,814,313 13,204,119 16,423,019 2,000 1,058,750 2,518,75 2,	Salary payment							200,000	3.400,000	1,920,00
al no. of payment trx 2,500 4,375,000 5,690,000 9,000 10,494 100%	Automatic games					250,090	AND MA	2350400	3 120 240	4 553 96
10,494 1	Taylocal talough COATA							And to prefer	OLD TOP TO	1,403
al no. of payment trx 7,493,000 4,375,000 5,890,000 7,652,250 8,814,333 13,204,119 16,429,019 al no. of payment trx 37,185 1,968,750 2,518,75 4,456 4,733,517 5,513,926 al no. of payment trx 3,371,850 1,968,750 2,550 2,500 2,500 4,236 4,461,426 and collection 4,121,150 2,406,250 3,128,125 4,516,563 4,676,547 8,470,600 20,000 augh CD/ATM 4,121,150 2,406,250 3,128,125 4,66,563 4,676,547 8,470,602 2,500 augh CD/ATM 4,121,150 2,406,250 3,128,125 4,66,563 4,676,547 8,470,602 3,128,125 augh CD/ATM 4,121,150 2,406,250 3,128,125 4,66,563 4,676,547 5,144,202 5,144,202 5,144,202 augh CD/ATM 2,500 3,00,000 2,150,400 300,000 2,150,400 3,120,240	Credit card					000'9	000'6	006'6	10.494	803
100% 100%	ter-bankflotra-bank transactions		7,493,000	4,375,000	5,690,000	7,652,250	8,814,313	13,204,119	16,429,019	22,181,5
3,371,850 1,964,750 2,561,875 3,335,688 3,837,766 4,733,517 5,503,926 4,464,723,517 5,503,926 4,464,723,517 5,503,926 2,500 2,500 2,500 7,125 14,250 2,559,375 3,327,188 3,826,266 4,203,892 4,461,426 2,503,75 3,327,188 3,826,266 4,203,892 4,461,426 2,503,75 3,327,188 3,826,266 4,203,892 4,461,426 2,883,000 720	Ratio to total no. of payment trx		100%	100%	100%	100%	100%	100%	100%	305%
45% 45% 45% 44% 44% 34% 136% 348% 14.250 2.500 7.152 14.250 7.2500 7.2500 7.125 14.250 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.2500 7.250000 7.250000 7.25000 7.2	Inter-bank transactions		3,371,850	1,968,750	2.561,875	3,335,688	3,837,766	4,733,517	5,503,926	5,249,19
ik market: 7,320 1,368,750 2,559,375 3,327,188 3,826,266 4,208,892 4,461,426 7,224	Ratio to total no. of payment ux		45%	45%	45%	44%	44%	36%	34%	23
### Comparison of the control of the	Inter-bank market			000000	0007	2007	0057	21,7	DC741	77.
ryment transfer 360,000 720,00	Customer-request		3,3 / 1,850	UC/,594,1	CIC, KCC/2	3,77,156	3,540,450	248,02,4	074 194.9	4,039,50
Extransive through CD/ATM through CD	Salary payment							744,000	200 000	30,00
Introught CD/ATM A,121,150 2,406,250 3,128,125 4,9000 13,500 20,250 A,121,150 2,406,250 3,128,125 4,906,563 4,976,547 8,470,602 10,925,094 Introught CD/ATM A,121,150 2,406,250 3,128,125 4,066,563 4,676,547 8,470,202 A,121,150 2,406,250 3,128,125 4,066,563 4,676,547 8,144,202 6,72,000 C transfer B,00,000 2,150,400 3,120,240 B,00,000 2,150,400 3,120,240	Automatic transfer		: .					200,000	700,007	1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.1.
6,000 9,000 13,500 20,250 4,121,150 2,406,250 3,128,125 4,316,563 4,976,547 8,470,602 10,925,094 55% 5,5% 5,5% 5,5% 5,6% 5,6% 6,4% 6,76,547 5,144,202 6,7% ymen: cransfer through CD/ATM 250,000 2,150,400 3,120,240	Payment intough CD/ATM									400,1
total no. of payment trx 55% 2,406,250 3,128,125 4,316,563 4,976,547 8,470,602 10,925,094 55% 55% 5,55% 5,56% 5,57% 5,74,202 5,79% 5,70% 5	Cardii card					0009	0006	13.500	20.250	20.37
55% 55% 56% 64% 67% 4,121,150 2,406,250 3,128,125 4,066,563 4,676,547 5,144,202 5,422,854 cquest 536,000 336,000 1,680,000 1,680,000 1,680,000 1,580,000	Intra-bank transactions		4.121.150	2,406,250	3.128.125	4.316,563	4,976,547	8.470.602	10.925.094	16 932.35
4,121,150 2,406,250 3,128,125 4,666,563 4,676,547 5,144,202 5,452,854 6,75,547 5,35,000 6,72,000 6,72,000 840,000 1,680,000 3,120,240 1,680,000 2,50,000 2,150,400 3,120,240	Ratio to total no. of payment trx		25%	25%	55%	26%	26%	848	67%	815
336,000 672,000 840,000 1,680,000 2,150,400 3,120,240	Customer-request		4,121,150	2,406,250	3,128,125	4,066,563	4,676,547	5,144,202	5,452,854	5,670,968
1,680,000 1,680,000 1,680,000 3,120,240 3,120,240	Salary payment							336,000	672,000	2,995,20
3,120,240	Automatic transfer						400	840,000	1,680,000	3,633,60
	Payment through CD/ATM					250,000	300,000	2,150,400	3,120,240	4,098,45
	Deposit incough CD/ATM									5,5

Table 7-14 B PROJECTION OF FINANCIAL TRANSACTION AND SETTLEMENT TOWARD 2000

(PLAN B : Case in which Kyrgyz economy will get a favorable up)

Reform Data Number of agricultural sector State enterprises Private enterprises Number of enterprises State enterprises Number of enterprises Deposit by enterprises Number of commercial banks Number of commercial banks Number of pank branches Number of pank branches Number of deposit accounts Number of deposit accounts Number of deposit accounts Number of alloyous accounts Number of alloyous accounts Number of alloyous accounts Number of alloyous accounts Number of cards—accounts Number of automatic ransfer Credit card Number of cards—accounts Number of cards—accounts A weages usage payment Those of automatic ransfer Credit card Number of cards—accoping enterprises Number of cards—accoping enterprises Number of cards—accoping enterprises Number of cards—accoping enterprises			2.352,000 2.352,000 2.352,000 47,800 7,124 2.900 2.900 2.900 2.900 2.900 128,140 128,140 128,140 100,000 4%	4,410,000 2,276,000 2,376,000 1,009 1,009 1,009 1,009 1,009 1,009 1,009 1,000	1978 4,489,000 2,402,000 57,300 1,500 55,800 1,578 8,362 548 2,192 2,192 2,192 2,192 2,192 2,192 2,192 2,000 250,000 250,000 1,125 1,125 1,125 1,000 1,500 1	1959 4,570,000 2,428,000 5,300 1,500 1,571 10,571 1,972 1,973 1	4,652,000 2,454,000 2,454,000 39,000 55,800 15,000 12,376 1,02,48 1,02,48 1,02,48 1,02,48 1,02,48 1,03,600 2,00,000 2,00,000 1,00,000 1,00,000 1,00,000 1,00,000 2,000 2
ntion Labor force et of agricultural sector State cuterprises Private farms et of enterprises Private enterprises (1,000,000 Som) Balance per account (Som) Crof commercial banks et of bank branches et of deposit accounts Number of individual accounts % to labor fonce Those of automatic transfer Those of automatic transfer Average wage per month Average wage per month Average wage per month		6.5	4,332,000 2,352,000 33,300 47,800 2,000 45,800 47,800 2,900 1,124 2,900 2,900 129,140	750 750 750 750 750 750 750 750 750 750	2,42,000 2,402,000 28,200 57,300 1,500 55,800 55,800 1,278 8,362 8,362 548 2,192 19 19 10% 56,000 50,000 1,125 1,125 1,125 1,125 1,000 1,000 1,000	\$4,570,000 2,428,000 38,900 57,300 1,500 1,500 1,500 1,971 1,688 50,000 0,000	4,652,000 2,454,000 3,000 3,000 1,500 1,500 1,301 1,301 1,301 1,301 1,301 1,301 1,301 1,300 1,30
Labor force agricultural sector State entreprises Private enterprises State enterprises Private enterprises Private enterprises State enterprises Private enterprises (1,000,000 Som) Palanco per account (Som) Commercial banks Palance per account (Som) Private enterprises accounts Number of enterprises accounts % to labor force Those of salary payment Those of salary payment Those of automatic transfer Number of cards—accepting enterprises Number of card holders(demestic people) Average usage per month		2	2352,000 33,300 47,800 2,000 45,800 47,800 2,800 7,124 290 2,900 1,124 19 19 19 10,9,140 10,9,140 10,9,140 10,9,140	2376,000 60 36,300 1,500 5,300 1,059 7,012 32,800 19 5,800 19 5,800 19 5,800 15,000 17%	2,402,000 28,200 38,200 57,300 1,500 55,800 55,800 19 2,192 19 2,192 10% 560,000 50,000 1,125 1,125 1,125 1,125 1,000	2,428,000 38,900 38,900 57,300 1,500 55,800 1,571 1,972 1,972 1	2,454,000 9,000 1,500
sector reprises arms croprises croprises croprises friction (1,000,000 Som) per account friction (Som) for account friction (Som) for account friction (Som) for accounts friction (Som) for accounts friction (Som) for accounts friction (Som) fr			120 33,300 47,800 2,000 45,800 7,124 280 2,290 2,290 2,290 119 19 10,3,40 10,3,40 10,3,40 10,3,40 10,3,40 10,3,40	66 36,300 57,300 1,500 55,800 7,012 2,302 2,302 15,020 15,000 17% 7%	20 38,200 57,300 1,500 55,300 1,578 8,362 8,362 548 2,192 19 560 10% 50,000 50,000 1,125 1,125 1,125 1,125 1,000 1,000	\$ 98,900 \$7,300 \$7,300 \$5,800 \$5,800 \$1,971 \$1,9	9,000 57,300 1,500 1,500 1,500 1,2376 1,2376 1,2376 1,3500 20,000 20,000 20,000 150,000 150,000 150,000 20,000 20,000 20,000 150,000 1
arms crprises crprises crprises (1,000,000 Som) per account (Som) (1,000,000 Som) per account (1,000,000 Som) per account (Som) (1,000,000 Som) per account (Som) (Som			23,300 47,800 2,000 45,800 45,800 1124 220 290 290 229,140 129,140 129,140 129,140 129,140 129,140	36,300 57,300 1,500 55,800 1,059 7,012 392 2,240 2,240 15,020 15,020 175,000	20 38,200 57,300 1,500 55,800 1,278 8,362 8,362 8,362 8,362 8,362 1,192 1,123 1,125 1,125 1,000 1,000 1,000	38,900 57,300 1,500 55,800 1,571 10,234 739 1,871 1,871 1,83,510 37,5,000 1,688 50,000 1,688 50,000 1,688 50,000 1,688 50,000 1,688 50,000 35,600 35,	99,000 57,300 1,500 5,800 1,901 12,376 1,024 2,037 655,600 153,600 153,600 200,000 200,000 200,000 150,000 150,000 150,000 150,000 150,000 150,000 150,000 203,445 203,755 27,750
atms ctprises micrprises (1,000,000 Som) per account (Som) per account (Som) banks sus sus sus of cnterprise accounts of individual accounts of anionance transfer of automatic transfer of cards—accoping enterprises			23,300 45,800 45,800 45,800 47,1124 290 290 290 290 290 1194 129,140 129	36,300 55,800 1,500 55,800 1,059 7,012 392 2,240 19 560 326,020 151,020 175,000 7%	28,200 1,500 1,500 1,278 8,452 5,482 5,482 5,482 192 22,192 1,52,840 1	38,900 1,500 1,500 1,500 1,571 10,271 1,971 1,971 1,971 1,971 1,971 1,971 1,971 1,088 1,00,000 1,688 50,000 1,688 50,000 35,692,865	39,000 53,000 1,500 1,500 1,301 1,024 1,024 2,048 2,500 2,00
riterprises (1,000,000 Som) per account (Som) per account (1,000,000 Som) per account (Som) banks us us us sus sus sus sus sus sus sus			7,800 2,000 45,800 45,800 7,124 290 2,290 2,290 1129,140 1129,140 1129,140 1129,140 1129,140 1129,140 1129,140	75.300 1.1500 55.800 1.105.9 7.012 3.22.40 1.9 5.60 3.26.020 151,020 175,000 776	27,300 1,500 25,800 1,278 8,362 8,48 2,192 2,192 2,192 2,000 1,123,840 1,123,840 250,000 50,000 50,000 1,125 1,125 1,000 1,000	57,300 1,500 55,800 1,571 10,234 739 739 739 1971 1,971 1,971 1,971 1,500 35,500 100,000 100,000 10,000 35,600 35,	57,300 15,800 12,376 1,024 2,048 2,048 25,360 20,00
exprises Interprises (1,000,000 Som) per account (Som) (1,000,000 Som) per account (Som) (L,000,000 Som) per account (Som) (Ann) (2,000 45,800 7,124 7,124 2,800 2,800 2,800 129,140 129,140 109,140 109,140 109,140 109,140	1,500 5,580 1,059 7,012 2,392 2,392 2,392 3,560 326,020 151,020 175,000 7%	1,500 51,500 1,578 8,362 8,362 548 2,192 19 560 10,2840 250,000 50,000 50,000 1,125 1,125 1,125 1,000 1,500	1500 55,800 1,571 10,234 10,234 19 560 580 580 19 580 19 19 19 19 19 19 19 19 19 19	1,500 1,500 1,901 1,23% 1,024 2,048 560 653,600 153,600 153,600 20% 20% 20,000 20,000 20,000 20,000 150,
riterprises (1,000,000 Som) per account (Som) per account (L,000,000 Som) per account (L,000,000 Som) per account (Som) banks intro sures of enterprise accounts of individual accounts of individual accounts of automate reansfer of automate reansfer of cards—accoping enterprises of card bedens (domestic people) usage per month			45,800 7,1124 290 2,900 19 560 229,140 123,140 100,000 44% 500	5,800 1,059 7,012 392 2,240 19 560 326,620 15,020 175,000 776	25,800 1,278 8,462 548 2,192 1,192 1,125 1,125 1,000 1,000 1,000 1,125 1,125 1,000 1,000 1,000	55,800 1,571 10,234 739 739 1971 1971 13,510 35,500 15,500 15,68 100,000 1,688 50,000 50,000 25,000 35,692,865 35,692,865 35,692,865 35,692,865	55.800 11,901 12,376 1,024 2,048 560 653,600 153,600 200,000 200,000 200,000 200,000 200,000 200,000 200,000 150,000 1
per account (1,000,000 Som) per account (Som) per account (Som) banks tas banks of carceptise accounts of individual accounts of individual accounts of allary payment of automatic ransfer of carche-accopting enterprises of card beloers (domestic people) usage per month			220 280 290 290 560 229,140 123,140 100,000 100,000	1,059 7,012 392 2,240 19 5,60 326,020 151,020 175,000 7%	1,278 8,362 548 548 2,192 102,840 152,840 152,840 152,840 162,000 260,000 260,000 10,000 10,000 10,000	11,571 10,234 739- 1,971 1,971 1,971 1,586 1,500 1,588 1,688 50,000 0,50 0,50 35,692,865	1,901 1,2,376 1,02,46 2,046 5,60 653,600 200,000 200,000 200,000 150,000 150,000 150,000 48,915,445 23,750
per account (Som) (1,000,000 Som) per account (Som) banks tes of carceptise accounts of individual accounts abor force of salary payment of automatic transfer of carc be-accopting enterprises of carc be-accopting enterprises of carc be-accopting enterprises of carc beloctre (domestic people) usage per month	200		7,124 2,290 2,290 1,40 129,140 129,140 100,000 100,000 100,000	7,012 2,340 2,340 19 5,600 326,020 151,020 17% 777 776	8,362 548 2,192 2,192 560 402,840 152,840 250,000 250,000 50,000 1,125 1,125 1,125	10.234 739 19 19 560 528,510 153,510 375,000 153,600 100,000 1	12,376 1024 2,048 2,048 653,600 153,600 200,000 200,000 150,000 150,000 48,915,445 23,750
account (1,000,000 Som) bits Ins conterprise accounts individual accounts alary payment intitorialic transfer cards—accopting enterprises cards—accopting enterprises card bolders (domestic people) age per month	2 C		290 290 19 19 129,140 129,140 100,000 4% 500	2,240 2,240 19 19 560 326,020 151,000 175,000 776	2,192 19 560 402,840 152,840 250,000 50,000 1,125 1,125 1,0000 1,5000 1,	739- 1971 1971 1971 193-510 193-510 375,000 100,000 100,000 100,000 100,000 100,000 35,000 35,602,865 35,632,8	1,024 2,048 5,09 153,600 153,600 150,000 20% 20% 20% 20% 20% 20% 20%
nks nks recopunt ns recopunts			2,900 229,140 123,140 100,000 4% 500	2,240 19 19 260 326,020 15,020 175,000 7%	2,192 19 560 402,840 152,840 25,000 250,000 50,000 1,125 1,125 1,125 1,0000 1,5000	1971 19 286 528,510 153,510 153,510 153,500 156,000 100,000 10,688 50,000 6,50 35,692,865 35,692,865 35,87	2,048 560 653,600 153,600 200,000 200,000 150,000 150,000 48,915,445 23,750
nts conteprise accounts individual accounts a force sulary payment carde-accoping enterprises carde-accoping enterprises age by though			19 560 229,140 1129,140 100,000 4% 500	19. 560. 326,020. 151,020. 175,000. 776.	19 560 402,840 152,840 152,840 250,000 50,000 50,000 1,125 1,125 10,000 1,500	19 528,510 153,510 375,000 159,000 100,000 100,000 10,000 1,688 50,000 6,50 6,50 35,692,865 35,692,86	253 600 153,600 153,600 200,000 200,000 150,000 100,000 48,915,445 23,750
ns conceptive accounts and vividual accounts in force alary payment alary payment alary payment cards—accepting enterprises card biolders (domestic people) age per month			560 229,140 129,140 100,000 4% 500	32,600 326,020 151,020 175,000 7% 79	560 402,840 152,840 250,000 50,000 50,000 1,125 1,125 1,000	560 228,510 153,510 375,000 15% 100,000 100,000 1,688 50,000 0,50 35,692,865 35,692,865 35,692,865 35,692,865 35,692,865	560 653,600 153,600 20% 20% 200,000 150,000 150,000 100,000 48,915,48 23,750
ns coterprise accounts individual accounts individual accounts at a same and a same at			229,140 125,140 100,000 4% 500	326,020 15,020 175,000 77% 750	152,840 152,840 152,840 25,000 10% 55,000 50,000 1,125 1,125 1,000 1,500	528,510 375,000 375,000 15% 100,000 1,688 50,000 6,50 35,692,865 35,878	653,600 153,600 20% 20% 200,000 150,000 180,000 0,80 48,915,48 23,750 23,750
Number of enterprise accounts Number of individual accounts % to labor force Those of salary payment Those of automatic transfer Number of cards-accepting enterprises Number of card holders (domestic people) Average usage per month			129,140 100,000 4% 500	151,020 175,000 7% 78 750	152,840 250,000 10% 50,000 50,000 1,125 10,000 6,50	153,510 375,000 15% 100,000 100,000 1,688 50,000 6,50 35,692,865 35,692,865 35,692,865 35,692,865	153,600 200,000 200,000 150,000 150,000 100,000 48,915,445 23,750
Number of individual accounts % to labor force Those of salary payment: Those of automatic transfer: Number of cards—accopting enterprises Number of and holders (domestic people) Average usage per month			100,000	175,000 7% 7% 750	250,000 10% 50,000 50,000 1,125 10,000 6,50	375,000 15% 100,000 100,000 1,688 50,000 05,000 05,000 35,692,865 35,852,865	200,000 20% 20% 200,000 150,000 180,000 48,915,48 23,750
Number of cards accoping enterprises Number of cards accoping enterprises Number of card holders (domestic people) Average usage per month			600 000	7% 7% 0	10% 50,000 50,000 11,125 10,000	15% 100,000 100,000 1,688 50,000 0.50 35,692,865 35%	20% 200,000 150,000 2,531 100,000 48,915,48,23,750 23,750
These of salary porcent Those of salary porcent Those of automatic transfer Number of cards -accepting enterprises Number of card holders (domestic people) Average usage per month			0.00	750	50,000 50,000 1,125 10,000	100,000 100,000 1,688 50,000 0.50 35,692,865 35,87	200,000 150,000 100,000 0,80 48,915,445 23,750
Those of automatic transfer Those of automatic transfer Number of cards—accepting enterprises Number of card holders (onnestic people) Average usage per month			900 005	750	50,000 1,125 10,000	109,000 1,688 50,000 0.50 35,692,865 35%	2,531 100,000 0.80 48,915,445 37% 23,750
Number of cards—accepting enterprises Number of card bolders(domestic people) Average usage per month			0. 0.	750 0	10,000	35,692,865 35,692,865 35,692,865	2,531 100,000 0.80 48,915,445 37% 23,750
Number of cards—accepting enterprises Number of card holders(domestic people) Average usage per month			0.	750 0	1,125	1,688 50,000 0.50 35,692,865 35%	2,531 100,000 0.80 48,915,445 37% 23,750
(c)			0	0	10,000	50,000 0.50 35,692,865 35%	100,000 0.80 48,915,445 37% 23,750
					5	0.50 35,692,865 35%	0.80 48,915,445 37% 23,750
					3	35,692,865 35%	48,915,445 37% 23,750
	7.483.000	0327500	14.323.000	16.483.375	26.495.321	35%	37%
			53%	15%	61%		23,750
Inter-bank market translations			2.500	2,500	7,125	14,250	
	7,493,000 6,250,000		14,062,500	16,171,875	18,597,656	21,387,305	24,595,400
		20%	20%	15%	15%	15%	
Salary payment					1,200,000	2,400,000	4,800,000
Automatic transfer					3,000,000	9,000,000	9,000,000
Payment through CD/ATM			250,000	300,000	3,617,040	5,571,060	8,721,600
Deposit through CD/ATM				•			784,320
			9'000'9	0006	73,500	320,250	575,099
	6,2	Š.	14,321,000	16,483,375	26,495,321	35,692,865	51,738,885
total no. of payment trx			100%	100%	2001	2001	2001
	3,371,850 2,812,500	4,22	6,336,625	7,288,844	5,0445,V	14,1/6,/6/	14,1/4,45/
of payment trx	45%	45%	% 44	\$ 55 5 5	2017	950 91	3 £
	005 018 0		20247	77777	8 368 945	9 624 287	11.067.930
Ŕ		: .		1	360,000	720,000	91.200
Salaty payment				:	900,006	1.800,000	1.140
Description (T)/ATM					•		876,910
Person through CD/ATM							83,182
Credit card			900'9	000'6	13,500	20,250	30,375
	4,121,150 3,437,500	5,156,250	7,984,375	9,194,531	16,845,751	23,514,078	39,564,398
total no. of payment trx	55% 55%		26%	26%	54%	%99	81%
	4,121,150 3,437,500	5,156,250	7,734,375	8,894,531	10,228,711	11,763,018	13,527,470
Salary payment					840,000	1,680,000	7,488,000
Automatic transfer				200	2,100,000	4,200,000	9,033,600
Payment through CD/ATM			250,000	300,000	3,617,040	5,571,060	7,849,440
Deposit through CD/ATM					90000	300 000	/US,588
Credit card					avain.	ODO, ODO	NATION.

Table 7-15 TRANSACTION VOLUME ANALYSIS

	Population (millions)	Annual Volume (millions)	Per Head Volume
	Α.	В	B/A
Belgium	10.00	928.8	92,9
Canada	27.44	3,422.4	124.7
France	57.37	9,593.1	167.2
Germany	80.59	10,215.6	126.8
Italy	57.73	1,819.2	31.5
Japan	124.34	4,169.7	33.5
Netherland	15.18	1,808.0	119.1
Sweden	8.69	799.0	91,9
Switzerland	6.90	437.2	63,4
United Kingdom	57.85	6,606.0	114.2
United States	255.02	72,555.0	284.5
Average	63.74	10,214.0	160.3
Kyrgyz in 1993	4.41	7.5	1.7
Kyrgyz Plan A	4.42	21.0	4.8
Kyrgyz Plan B	4.65	48.9	10.5

Note: 1993 data. For Kyrgyz in 1003 and 2000 projection.

Source: BIS and Study Team

Table 8-1 THE SIZE OF SHORT-TERM MONEY MARKET AND FOREIGN EXCHANGE MARKET IN 2000

	INTER-BANK MARKET	T/B SECONDARY MARKET	FOREIGN EXCHANGE MARKET
	(million Som)	(million Som)	(million Som)
TURNOVER	24,752	17,182	348
AMOUNT STANDING	476	955	
PERCENTAGE TO]
NOMINAL GDP (%)	0.60	1,21	

Note: Figures are estimates by the Study Team

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Histed processing on inter-bank and To spilit inter-bank exvices and intra-bank ones inter-bank payments Delay on payments procedure To connect all the banks electrically all the time Delay on payment procedure To connect all the banks electrically all the time becomplete computerization Data processing at the level of To introduce correct processing in the bost system Decument based payment Decument based payment Decument based payment Detay on the communication lines Data processing services in limited sees Data processing services in limited sees Our the communication in the services Data processing services in limited sees Our the communication in the services Data processing services in limited sees To provide communication services Our the communication To provide access points with the standard methods	Lack of fraids for payment Mixed processing on inter-bank and intra-bank payment Delay on payment procedure Leday on payment procedure Data processing at the level of branch office facility Lack of competition Document based payment Mail transmission of payment orders Small capacity on the communication lines Data processing services in limited area Complicated way of data collection	bank ones If the time. bost system
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Delay on payment procedure To councer all the banks electrically all the time becomplete computarization Data processing at the level of introduce central processing in the host system. Lack of competition Decument based payment Decument based payment Decument based payment To introduce assomation at every branch office. Mail transmission of payment orders Via computer network Small capacity on the communication lines To have the first communication lines or services Data processing services in limited sees To provide communication services	Delay on payment procedure Incomplete computerization Data processing at the level of branch office facility Lack of competition Document based payment Mail transmission of payment orders Small capacity on the communication lines Data processing services in limited area Complicated way of data collection	Il the time. bost system
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Incomplete computerization Data processing at the level of To separate inter-bank payment from To introduce free competition among Commercial banks Document based payment orders Mail trunsmission of payment orders Via computer network Small capacity on the communication lines or services Data processing services in limited area To provide communication lines or services To provide communication services Over the country To provide access points with the standard methods	Data processing at the level of Data processing at the level of branch office facility Lack of competition Document based payment Mail transmission of payment orders Small capacity on the communication lives Data processing services in limited area Complicated way of data collection	bost system (1)
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Document based payment To introduce automation at every branch office. Mail transmission of payment orders Via computer network Small capacity on the communication lines Data processing services in limited area To provide communication services Over the country Complicated way of data collection To provide access points with the standard methods	Document based payment Mail transmission of payment orders Small capacity on the communication lives Data processing services in limited area Complicated way of data collection	• .
Document based payment Mail transmission of payment orders Data transmission of payment orders via computer network Small capacity on the communication lines Data processing services in limited area Over the communication lines or services Ormplicated way of data collection To provide access points with the standard methods	Document based payment Mail transmission of payment orders Small capacity on the communication lives Data processing services in limited area Complicated way of data collection	
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Small capacity on the communication lines To share the fast communication lines or services Data processing services in limited seca. To provide communication services over the country Complicated way of data collection To provide access points with the standard methods		
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,我们就是我们的,我们就是我们的,我们就是我们的,我们们也不是一个人,我们们的,我们们的,我们们的,我们们的,我们们们的,我们们们们们们们们们们们	(1) (1) (1) (1) (1) (1) (1) (1) (1) (1)	
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Table 9-2 Outline of Subsystems

NBK Settlement System	Open/Close A/Cs of	Commercial banks		Receiving P/I				Debiting sender's A/C	at RTGS		Crediting receiver's	A/C at RTGS		Sending confirmation	to the senders		Updating balance by	the final positions		Notifying balance to	commercial banks							
Clearing System	Open/Close positions (of Commercial banks	The second second second	Receiving PA	from Message Switch-	ing System		Debiting sender's	position	以下の 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Crediting receiver's	position	《《《··································	Sending confirmation S	to the senders		Notifying final positions	to all the participants		Accept authorization	from participants		Sending final position	to NSS				
Intra-bank System	Open/Close A/Cs of	branch offices	And the second of the second o	Receiving P/I	from Message Switch-	ing System		Debiting sender's A/C		Crediting receiver's	A/C		Sending confirmation	to the senders			Other Operations	if required										
Message Switching System	Receiving data	from Node Systems	from Clearing System	from NSS	from Intra-bank System	from Banks' system		Response to sender		Logging received data		Validation checking		Queuing sending data		Sending data	to Node Systems	to Clearing System	to NSS	to Intra-bank system	to Banks' system		Monitoring network	Alarm presentation	Switch to back ups		Remote login	Distributing software
Node System	Receiving data	from Office Systems	from Node Systems	from Message	Switching	System	Response to sender		Logging received data		Validation checking		Format conversion		Quening sending data		Sending data	to Office Systems	to Node Systems	to Communication	Center		Sending error report		Monitoring equipments	Monitoring lines	Switch to back ups	Remote login
Office System	Business operations	Deposits	Credits	Payment Orders	Accounting etc.			Copying payment data		Sending payment data		Saving unconfirmed	payment data		Receiving confirmation Quening sending data		Reconciliation		Receiving Incoming	payment order		Sending Confirmation						

Table 14-1 ESTIMATED CONSERVATION OF FLOATING FUNDS

			-												
						(1st P	(1st Phase)				(2nd Phase)	hase)			
		1994	1995	1996	1997	1998	6661	2000	2001	2002	2003	2004 2005	2005	2006	2007
Unsettled Amounts	(000 Som) 167,777	167,777	218.13	283,543	326.074	358,681	0 283,543 326,074 358,681 380,202 395,410 411,227 427,676 444,783 462,574 481,077	395,410	411,227	427,676	444,783	462,574	481,077	500,320	520,333
Growth Rate	(%)		30	8	15	10	9	7	4	4	4	4	4	4	₹
Credit Multipliers		1.24	1.30	1.34	1.40	1.59	1.72	1.86	1.86	1.86	1.86	1.86	1.86	1.86	186
Appraisal Value	(000 Som) 208,043	208,043	28,304	379,947	456,503	570,302	379,947 456,503 570,302 653,947 735,462 764,882 792,477 827,296	735,462	764,882	792,477	827,296	860,387	860,387 894,803 930,595 967,819	930,595	967,819
Valuation Rate	(%)	20	92	20	20	20	20	20	20	20	20	20	ଯ	20	8
Loss of Annual Opportunity	(%)	41,608	41,608 56,708	75,983	91,300	114,060	91,300 114,060 130,789 147,092 152,976 159,095 165,459 172,077 178,960 186,119 193,564	147,092	152,976	159,095	165,459	172,077	178,960	186,119	193,564
Cost (Effectiveness)		_													1

Note: Numbers up to 1997 are only reference due to un-effectiveness.

Table 14-2 BENEFIT BY MANPOWER SAVING IN AVIZO SERVICE

		(1st Phase)	nase)	(2nd Phase)	hase)	,		;				
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
Labor Savings	(minutes)	2	2	2	2	2	2	2	2	2	2	:
Total Annual Number of Transfer	(000)	935	166	1,031	1,115	1,160	1,206	1,254	1,305	1,357	1,411	
Total Annual Work Hours	(h)	31,177	33,048		ij	38,661	40,207	41,816	43,488	45,228	47,037	
Manpower Savings	(man)	17.8	18.9	9.61		22.1	23	23.9	24.9	25.8	26.9	
Annual Manpower Cost	(Som)	10,325	10,685	11,057	11,442	11,840	12,253	12,679	13,121	13,578	14,051	
Annual Manpower Savings	(moS 000)	184	202	217	243	262	282	303	326	351	378	

able 14-3 BENEFIT MANPOWER SAVING IN UNSETTLED A/C PROVING SERVICE

		(1st Phase)	lase)				(2nd Phase)	hase)			
		1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Labor Savings	(minutes)	I	-	1		1	1	1	1	1	1
Total Annual Number of Transfer	(000)	935	106	1,031	10,723	11,152	11,598	12,062	12,545	13,046	13.568
Total Annual Work Hours per Employee	Ξ	155,883	165,236	171,846	178,720	185,868	193,303	201,035	209,077	217,440	226,137
Manpower Savings	(man)	68	22	86	102	106	110	115	119	124	129
Annual Manpower Cost	(Som)	10,325	10,685	11,057	11,442	11	12,253	12,679	13,121	٦	14,051
Annual Manpower Savings	(000 Som)	920	1,009	1,086	1,169	1,258	1,353	1,457	1,568	1,687	1,816

Table 14-4 SUMMARY OF TOTAL ECONOMIC BENEFIT

		(1st Phase)	hase)				(2nd Phase	hase)			
		1998	1999			2002	2003		2005		2007
Decres of Float	(000 Som)	114,060		"		159,095	165,459		178,960	,	193,564
Abolition of Avizo	(maS 000)	184	202	217	243	797	282	303	326	351	378
(Manpower Savings)	(man)	17.8				22.1	23.0	ï	24.9	.	26.9
Decrease of Confirmation Work	(moS 000)	076				11,840	12,253		13,121		14,051
(Manpower Savings)	(man)	89.0	()	1.1		106.1	110.4		119.4		129
Total Monetary Effect	(moS 000)	115,164				171,197	177,994	_	192,407		207,993
(Manpower Savings)	(man)	106.8				128.2	133.4	٠.	144.3	. 1	155.9

Table 14-5 ECONOMIC RATE OF RETURN (1/10): BASE CASE

										(UNIT: 1,000	(\$80)		
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006	2002
CONOMIC COCT	23157	13302	3855	4741	6320	3589	2968	2968	2968	2968	2968	2968	2968
ELUNOMIC COST	7313	13302	3855	2087	3666	621	0	0	0	0	0	0	0
Linvesiment Cost	1905	7081	0	0	683	0	0	0	0	0	0	0	0
(1) racinues	122	6216	0	0	295	0	0	0	0	0	0	0	0
Hardware purchase	2/21		· C	c	C	C	c	C	0	0	0	0	0
Auxiliary inclinics	3 6	751	C	0	20	C	0	0	0	0	0	0	0
Transport Expenses) K	2	0	0	13	0	0	0	0	0	0	0	٥
INSTITUTION COSTS	3	7	C	0	360		C	0	0	0	0	0	0
Commiscators	1721	(151	3785	2045	2948	30	0	0	0	0	0	0	3
(2)Soliware	1135	12	0	0	129	0	O	0	0	0	0	0	0
Coffeening development	1356	2652	372	432	527	0	0	0	٥	0	0	0	0
Contract transfer		C	576	288	240	336	٥	0	0	•	0	0	0
Theritan	o c		576	887	576	0	O	0	•	0	0	0	0
Suntail	350	782	24	384	448	96	0	0	0	0	0	0	0
International gravel) (*)	36	115	26	88	35	0	0	0	0	o	0	0
Todoine/ordiem allowance	86	146	437	293	317	98	0	0	0	0	0	0	0
Continonnaise	000	1162	565	787	432	55	0	0	0	0	0	0	0
(3)(her Evanger	;	8	8	42	31	13	0	0	0	0	6	0	• •
sayana animadad	37	3	3	38	28	12	0	0	0	0	0	٥	0
	7	9	9	4	3		0	0	0	0	o	0	0
											;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;;		
2 Operating Costs	0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968
	0	0	0	56	56	43	5	43	€	€	43	43	4
Electric nower charge	0	0	0	13	Ω.	14	14	14	14	7	74	7	Ξ
Telecom, line charge	٥	0	٥	13	13	29	53	56	29	29	62	29	5
(2)Fixed Costs	0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct labor costs	0	0	0	49	49	49	40	49	49	49	49	6	2
(seperal everhead	0	0	0	E	33	31	3	31	3	33	E	31	E
Maintenance cost	9	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Office rental	0	0	0	20	82	20	20	25	33	20	20	20	8
	•	٠	c	11516	13200	14840	02751	16062	90291	17384	18086	18816	92561
ECONOMIC BENEFIT	5 6	0	· ·	11,406	13070	14700	15208	15910	16546	17208	17896	18612	19356
(1)Decrease of Float)	o ()	00411	67067	14/07	96761	36	38	307	33	35	£
(2)Abolition of Aviso	3 (-	-	e e	3 5	777	117	961	34	7 4 5	157	169	<u> </u>
(3)Decrease of Manpower	0			3.5	101	601		034					12°
NEL BENEAT FLOW	-5157	-13302	-3855	6775	0889	11251	12471	13094	13741	14416	15118	15848	16608
							. L				[2, , , 2		
	NPV AT C	NPV AT CUT-OFF RAT	TE OF 12%		12148	-	IV.: IXATTO	1.86		EIKK ≖	31.00%		

Table 14-5 ECONOMIC RATE OF RETURN (2/10): INVESTMENT +10% CASE

	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	448
PCONOMIC COST	5673	14632	4241	4950	2899	3651	2968	2968	2968	2968	2968	2968	2968
CONOMIC COST	5,475	14632	4241	2296	4033	683	0	0	0	0	0	0	0
Linvesting Cost.	2006	7789	0	0	756	0	0	0	0	0	O	0	0
Trachines Hardware muchase	1199	6838	0	0	325	0	0	0	0	0	0	0	0
Auviliary (acillies	Î	0	0	0	0	0	0	0	0	0	0	0	0
Transport Expenses	3	151	0	0	23	0	0	0	0	0	0	0	0
Installation costs	: 53	8	0	9	13	0	O	0	0	0	O	0	0
solution,)	061	708	0	0	396	0	Ç	0	0	0	0	٥	0
CONCOLUENTE.	3532	6766	4164	22.50	3243	699	ρ	0	0	0	0	0	0
Basic software nurchase	096	1948	0	0	142	0	0	0	o	0	0	0	0
Software development	1492	2917	1069	475	792	0	0	0	0	0	0	0	9
System transition	0	0	534	317	264	370	0	0	0	5	,0 :	0	0
Testing	0	0	634	317	634	0	.0	0	0	, O	ò	0	0
Translators fee	282	422	865	422	493	106	0	0	0	0	0	0	0
International travel	42	40	127	84	95	39	0	0	0	Φ.	0	0	•
Lodeine/perdiem allowance	. 26	161	481	322	349	95	0	0	Q	0	0	0	0
Contingencies	099	1278	622	312	475	61	0	0	0	ဝ	0	0	
(3)Other Expenses	45	11	77	46	34	14	0	0	Ö	0	0	0	.
Preoperating expueses	41	70	70	42	31	13	0	0	0	0	o o	0	
Contingencies	4	7	. 7	₹.	m	-	0	0	0	0	0	0	.
	*											i i	0
2. Operating Costs	0	0.	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	8067
(1)Variable Costs	0	0	0	97	26	43	4. 6.	£4	43	43	43	E4 .	
Electric power charge	0	0	0	13	13	14	14	14	14	14	41	4	4
Telecom, line charge	0	0	0	13	13	53	50	29	29	56	29	29	53
(2) Fixed Costs	0	Ö	Ο.	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct Jabor costs	0	0	0	49	49	49	49	49	49	49	46	46	5
General overhead	.0	0	0	31	31	31	31	31	31	31	31	31	
Maintenance cost	0.	0	.0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Office rental	0	0	0	07	20	20	92	50	20	8	20	20	50
×	\$	•	<	7.000	00001	200	16420	03031	00291	17384	78081	18816	10576
ECONOMIC BENEFIT	9	0 9	00	11510	13070	14340	15208	15910	16546	17208	17896	18612	19356
(1) Decrease of Float) <u>(</u>		o c	31	2007	22	24	26	28	39	33	35	38
(2) Mercease of Mannower	o	0	0	2,	101	109	117	126	135	146	157	169	182
		6673.8	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	7757	6137	00111	12,421	13004	13741	71441	35118	15848	16608
NET BENEFIT FLOW	-2673	-14032	-4741	0000	0212	11109	17.47	13034	11/61		7:7777	The state of the s	200
	NBV AT C	NEV AT CITT-ORE PATE	TE OF 12%	<u>L</u> .	20770	•	B/C RATTO:	1.75	. -	EIRR =	29.08%		
	7 10 111		,	-						1			

Table 14-5 ECONOMIC RATE OF RETURN (3/10): INVESTMENT +20% CASE

Continuence cont			1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2002
Discription Cost	SOJ JIMONOJA		6188	15962	4626	5158	7053	3713	2968	2968	2968	2968	2968	2968	2968
Chyperistics	Total Control of the		61.88	15962	4626	2504	4399	745	0	0	0	0	0	0	0
Transfer of the control of the con	Carrie and Carrie Cost		2286	8407		c	824	, C	0	0	0	0	0	0	0
Transition costs Academic purposes Acade			0077	7 6 6	, c	, c	ž	· c	_	_	c	c	0	•	0
Available of the control points	Harc	ware purchase	9757	6541	5 (.	}	s : c	.		9 5		_	c	-
Transplant Expenses	Aux	iliary facilities	480	0	2	.	5	-	5 1	> (>	3	,	• •	<u> </u>
Charletine costs 28 713 0 0 14 0 0 0 0 0 0 0 0 0	Tran	sport Expenses	44	1	0	0	25	0	0	•	-)	> (- (>
Considerate parectes 2.08 77.3 4.54 6.04 4.52 6.04	Insta	llation costs	28	101	٥	0	14	0	0	0	0	0	0	-	>
(j)Sulvavre Basic solvave purchase 1048 2125	Com	ingencies	208	773	0	0	432	0	0	0	0	0	0	0	0
Designation			3853	7381	4542	2454	3538	730	0	0	0	O	0	0	0
Software decelopment 1627 3182 1156 288 453 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		c software purchase	1048	2125	0	0	155	0	0	0	0	0	0	0	3
Training 1	a g	ware development	1627	3182	1166	518	15)8	0	0	0	0	ဝ	0	0	<u>.</u>
Treiting Treiting		em transition		Ç	169	346	288	403	0	0	0	0	0	0	0
Translations (cf. a) Translations (cf. a)	204		· c		691	346	691	0	0	٥	0	0	0	0	0
International trace	1004	April 1	בוות:	, 24	159	LyF	X13X	115	, c	C	c	0	0	0	0
International revert 106 175 254 322 360 103 0 0 0 0 0 0 0 0 0		isjators tee) ř	101	30.	5 6	501	Ę		· c	· c	c	c	C	0
pregrection allowance 106 175 524 352 40 105 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	mic	nanonal travel	9		9	12	20 E	1 6	ه د						•
Contingencies 720 1394 678 341 518 66 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	lbal	ging/perdiem allowance	108	175	524	352	380	103	-	o	5	33 1	÷ د)	-
(3) Other Expenses 49 84 84 50 37 16 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		ingencies	027	1394	678	ੜ	518	99	0	0	0	0	0	0	-
Preoperating expness 44 77 77 46 34 14 0 0 0 0 0 0 0 0 0	(3)Other Expense		49	₹ •	2	8	37	16	0	0	o'	0	0	0	0
tingencies 5 7 7 7 5 4 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		peratine exposes	77	+	11	46	쫎	14	0	0	0	0	0	0	0
Tric power charge 0 0 0 2654 2654 2968 2968 2968 2968 2968 2968 2968 2968	3	ungeneies	5	7	7	S	4	-	; 0	0	0	0	0	0	0
Tric power charge 0 0 0 0 2654 2654 2968 2968 2968 2968 2968 2968 2968 2968		a													:"
tric power charge	2.Operating Costs		0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968
rick power charge 0 0 0 13 13 14	(1) Variable Costs		0	0	0	26	26	43	43	43	43	£.	43	£	4
com. line charge 0 0 0 13 13 29 20 20		tric power charge		O	0	13	13	14	14	14	14	14	74	7	77
cri labor costs 0 0 0 2628 2628 2925 2925 2925 2925 2925 2925 2925 29	Tele	com, line charge	0	0	Ö	13	13	29	29	53	29	29	53	29	29
ce rental crosss 0 0 0 0 49 49 49 49 49 49 49 49 49 49 49 49 49			0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
ce rental 0 0 0 0 31 31 31 31 31 31 31 31 31 31 31 31 31		et labor costs	0	0	0	49	49	49	49	49	49	64	49	49	49
ce rental 0 0 0 2528 2528 2825 282 18816	Eg	eral overhead	0	0	0	31	31	31	31	31	33	33	3	33	Ξ.
CCF (FORIA) 0 0 20 1986 18816 199 nver 0 0 0 0 0 0 1440 1770 15910 16546 17208 17896 18612 199 nver 0 0 0 0 92 101 109 117 126 135 146 157 169 nver -6188 -15962 -4626 6338 6147 11127 12471 13094 13741 14416 15118 15848 169 NPV AF CUT-OFF RATE: OF 12% : 222293 13/C RATIO: T.65 165 1374 13741 14416 1518 15848 169	ia ∑	olenance cost		0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
NPV AT CUT-OFF RATE OF 12% 15783 15662 16709 17384 18086 18816 19 19 19 19 15783 15846 18816 19 19 19 19 19 19 19	100 100	ce rental	0	0	0	20	20	20	20	20	20	20	20	20	20
Neval															
wer 0 0 0 11406 13079 14709 15298 15910 16546 17208 17896 18612 19 wer 0 0 0 18 20 22 24 26 28 30 33 35 19 -6188 -15962 -4626 6338 6147 11127 12471 13094 13741 14416 15118 15848 16 NPV AT CUT-OFF RATE OF 12%: 272293 13/C RATIO 165	ECONOMIC BENEFIT		0	0	o	11516	13200	14840	15439	16062	16709	17384	18086	18816	19576
wer 0 0 0 0 18 20 22 24 26 28 30 33 35 wer 0 0 0 92 101 109 117 126 135 146 157 169 -6188 -15962 -4626 6358 6147 11127 12471 13094 13741 14416 15118 15848 16 NPV AT CUT-OFF RATE OF 12%: 272293 13/C RATIO 165	(1)Decrease of Float		.0	0	0	11406	13079	14709	15298	15910	16546	17208	17896	18612	19356
wer 0 0 92 101 109 117 126 135 146 157 169 -6188 -15962 -4626 6338 6147 11127 12471 13094 13741 14416 15118 15848 16 NPV AT CUT-OFF RATE OF 12% .	(2) Abolition of Aviso		0	0	0	81	20	22	25	26	28	8	33	35	8 6
-6188 -15962 -4626 6358 6147 11127 12471 13094 13741 14416 15118 15848 NPV AT CUT-OFF RATE: OF 12%: 222933 19/C RATIO: 1653 EIRR = 26.812	(3)Decrease of Manoo	wer	Q.	٥	0	25	101	109	117	126	135	146	157	169	142
-6188 -15962 -4626 6358 6147 11127 12471 13094 13741 14416 15118 15848 NPV AT CUT-OFF RATE: OF 12%: [22293] 1)/C RATEO: 163					1.										i'.
NPV AT CUT-OFF RATE: OF 12%: [27293]	NET BENEFIT FLOW			-15962	-4626	6358	6147	11127	12471	13094	13741	14416	15118	15848	16608
VTE OF 12%: 27293 WC RATIO 165						į			Įį.		¥:				
			NPV AT CU	-	3. OF 12% :	<u>L</u>	27293	AL II	C RATIO:	1.65		err =	26.81%		
										5.					· .

Table 14-5 ECONOMIC RATE OF RETURN (4/10): INVESTMENT -10% CASE

						1				ON 1 1000	(188)		-550
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ECONOMIC COST	4641	11972	3470	4532	5953	3527	2968	2968	2968	2968	2968	2968	2968
1.Investment Cost	4641	11972	3470	1878	3299	559	0	0	0	0	0	0	0
(1)Facilities	1715	6373	0	0	618	0	0	0	0	0	0	0	0
Hardware purchase	1145	5594	0	0	266	0	0	٥	0	0	0	0	0
Auxiliary facilities	360	0	0	0	0	0	0	0	0	0	0	0	0
Transport Expenses	33	123	O	0	18	0	0	0	0	0	0		0
[nstallation costs	21	2/2	0	0	11	0	0	0	0	0	0	0	o
Contingencies	156	580	0	0	324	0	0	9	0	0	0	Q	0
(2)Software	2890	5536	3407	1841	2653	547	0	0	0	0	0	0	o ,
Basic software purchase	786	1594	0	0	116	0	0	0	0	0	0	0	۰
Software development	1220	2387	875	383	648	0	0	0	0	0	0	0	0
System transition	0	0	518	82	216	302	0	0	o	0	O .	0	0
Testing	0	0	518	529	518	0	0	0	0	0	0	0	0
Translators fee	230	346	490	हे	403	98	0	0	0	0	0	0	0
International travel	34	32	5	89	77	32	0	o:	0	0	0	0	0
Lodging/perdiem allowance	79	131	393	264	285	1	0		0	0	0	0	0
Contingencies	240	1046	509	256	389	8	Ö	O	0	0	0	0	0
(3)Other Expenses	37	63	63	38	28	12	0	0	0	0	0	0	0
Preoperating expueses	33	58	58	35	SJ.	11	0	0	0	0	0	0	٥
Contingencies	4.	S	vs.	₵	e	-	Ö	0	0	0	0	•	0
			. ,					0,00	0,00	0,00	9700	9700	9000
2.Operating Costs	o ,	0	0	2654	2654	2968	2968	2908	29.67	9067	90.67	90.67	5
(1) Variable Costs	0	0	0	26	26	43	43	43	43	43	43	4	
Electric power charge	٥	0	0	13	£.	14	14	14	4.	14	14	4	4
Telecom, line charge	٥	0	0	ដ	13	. 29	53	29	29	29	29	29	53
(2)Fixed Costs	0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct labor costs	0	0	0	49	49	49	49	49	49	49	49	49	4
General overhead	0	0	0	31	31	33	31	31	31	31	31	31	31
Maintenance cost	0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Office rental	0	0	0	20	20	20	8	20	20	20	20	20	20
THE CHARLES CHE EXPLESSED		c	<	71516	13200	14840	15439	29091	16709	17384	18086	18816	19576
ONDERFORM OF THE STATE OF THE S	o c	> C	-	11406	13079	14709	15298	15910	16546	17208	17896	18612	19356
(1) Decrease of 1 and (2) At a little		o c	· c	<u> </u>	2	2	22	. 26	28	30	33	35	38
(2) Notificate of Managager	c	9	, -	32	<u> </u>	106	117	126	135	146	157	169	182
O Maria Casar or Transporter													
NET BENEFIT FLOW	4641	-11972	-3470	6984	7247	11313	12471	13094	13741	14416	15118	15848	16608
				<u> </u>	26345		J. Out & a ''	100		i agra	24 650.		
	NFV ALC	NEV AT CUT-OFF KAL	II: OF 12%	⊒ J .	1957.	4	/ K. K. 11K. ji	1,22		1 = VVII	(W. C.W. T.		

ECONOMIC RATE OF RETURN (5/10): INVESTMENT -- 20% CASE Table 14-5

											(UNIT: 1,000 USS)	US\$)		
		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2002
ECONOMIC COST	TS	4126	10642	3084	4324	5587	3465	2968	2968	2968	2968	2968	2968	2968
1.Investment Cost	5	4126	10642	3084	1670	2933	497	0	0	0	0	0	0	
(1)Facilities		1524	5995	0	O	550	0	o :	0	0	0	0	0	
	Hardware purchase	1018	4973	0	O	236	0	0	0	0	0	0	0	0
	Auxiliary facilities	320	0	0	0	0	O	O	0		0	0	0	•
	Transport Expenses	30	110	0	0	16	O	0	0	0	0	0	0	•
	Installation costs	18	. 67	0	0	01	0	ō	0	0	0	0	0	0
	Contingencies	138	515	٥	0	288	0	0	0	0	0	0	0	0
(2)Software		2569	4921	3028	1636	2358	486	0	0	0	0	9	0	0
	Basic software purchase	869	1417	0	0	103	0	0	0	0	0	0	0	0
	Software development	1085	2122	877	346	576	0	0	0	0	0	0	0	0
	System transition	0	0	461	230	192	269	0	.0	0	0	0	0	0
	Testing	ó	0	197	230	461	0	0	0	0	0	0	0	0
	Translators fee	205	307	435	307	358	11	0	0	0	0	0	0	0
	International travel	30	29	92	61	69	28	0	0	0	0	0	0	0
	Lodging/perdiem allowance	5	117	350	134	254	69	0	0	0	0	0	0	•
	Contingencies	480	930	452	7227	346	7	Ο,	0	0	0	0	0	0
(3)Other Expenses	X.	33	56	56	34	52	10	0	0	0	0	0	0	
T.	Preoperating expneses	30	51	51	9	22	10	0	0	0	0	0	0	•
.	Contingencies	E	'n	ن	ຕຸ	C1	,	0		0	0	0	0	0
		(•			ì	i i	4000		. ;				
Z.Uperating Costs		5	D.	-	7024	702	8967	2962	7708	2968	2968	2968	2968	296K
(1) Variable Costs		ο.	0	0	56	97	£.	4	43	43	<u></u>	43	43	£
	Electric power charge	0	0	0	Et.	ដ	4	14	14	14	7	7.	14	14
	Telecom, line charge	0	0	0	13	13	29	52	29	53	53	29	29	62
(2) Fixed Costs		0	9	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
	Direct labor costs	0	0	0	49	49	49	49	49	49	49	49	5	49
	General overhead	0	0	0	31	31	31	31	31	31	31	31	31	
	Maintenance cost	0	0	ာ ၁	252K	2528	2825	2825	2825	2825	2825	2825	2825	2825
	Office rental	0	0	0	20	50	20	20	20	20	20	20	g	30
					• .		:							
ECONOMIC BENEFIT	EFIT	0	0	0	11516	13200	14840	15439	16062	16709	17384	18086	18816	19576
(1)Decrease of Ploat	Dat.	0	0	0	11406	13079	14709	15298	15910	16546	17208	17896	18612	19356
(2) Abolition of Aviso	viso	0	٥	Ο,	18	8	22	24	56	28	9	33	35	38
(3)Decrease of Manpower	anpower	0	٥	0	35	101	109	117	126	135	146	157	169	17.2
		:	* *	: 		Ţ,								
NET BENEFITY FLOW	MO.	-4126	-10642	-3084	7192	7613	11375	12471	13094	13741	14416	15118	15848	16608
		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		0.00	<u>L</u>									
		NEVALCOL-OFF KA		: 01. 12%	J)	3 /003	23	C KA110: -	2.14	-	LIRR =	38.16%		
						;								

Table 14-5 ECONOMIC RATE OF RETURN (6/10): INVESTMENT -30% CASE

										(UNIT: 1,000 US\$)	15\$)		-
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
FCONOMIC COST	3610	9311	2699	4115	5220	3403	2968	2968	2968	2968	2968	2968	2968
Trees Trees (No.	3610	9311	5696	1461	2566	435	0	0	0	0	0	0	0
CANTAGE COST	1334	4057	<u> </u>	C	481	c	O	C		O	0	0	0
	100	1964			in c			· c	· c	·c	0	0	0
Lardware purchase	DAG.	4551	.	> 0	3	•	S () .) S	· c	• •	
Auxiliary facilities	280	0	0	5	5	>	>	.)	- :	> 6	> 6	> 6
Transport Expenses	56	96	0	0	14	0	0	0	0	.	0	-	> :
Installation costs	16	59	0	0	æ.	0	0	0	0	0	0	0	0
Confingencies	121	451	0	0	252	0	0	0	C	0	ဝ	0	0
(2)Software	2248	4306	2650	1432	2064	456	0	0	0	0	0 ()	0	9
Basic software purchase	611	1240	0	0	8	0	0	0	0	0	0	0	•
Software development	616	1856	089	302	3	٥	0	0	0	0	0	0	0
System transition	0	0	403	202	168	235	0	0	0	0	0	0	0
Testing	Ó	0	4 03	202	403	0	0	0	0	0	0	Ó	0
Translators fee	179	269	381	269	314	29	0	0	.0	0	0	0	0
International travel	27	25.	18	ંદ્ધ	.8	25	0	0	0	0	0	0	0
Lodging/perdiem allowance	62	102	306	205	222	09	.0	0	0	0	0	0	•
	420	813	396	199	302	39	0	0	0	0	0	0	0
(3)Other Expenses	29	49	49	50	22	6	0	0	0	0	Ö	0	0
	56	4. 5.	45	27	20	80	0	0	0	0	0	0	O
	m	4	4	6 0	61	. •	Ō	0	0	0	0	0	0
				1.									
2. Operating Costs	0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968
(1)Variable Costs	0	0	0	56	56	43	43	43	43	43	43	43	43
Electric power charge	0	0	0	13	. 13	14	14	14	14	14	14	14	14
Telecom, line charge	0	0	0	13	13	29	29	53	29	58	29	29	29
(2) Fixed Costs	0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct Jabor costs	O.	0	0	49	49	49	49	49	49	49	46	49	49
General overhead	0	0	0	31	31	31	31	31	31	31	31	31	31
Maintenance cost	0	0	Ф	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Office rental	0	O	0	20	20	20	20	20	20	8	20	20	20
1971. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	. c	c	c	71576	OCCE	1 4 6 40	16430	69091	16700	17384	78081	18816	19576
ECONOMIC BENEFIT	2	3	5	01011	2000	0101	VC.4C.	70001	60/01	1000	70007	2001	
(1)Decrease of Float	0	0	0	11406	13079	14709	15298	15910	16546	17208	17896	18612	19356
(2)Abolition of Aviso	0	၁	0	38	20	22	54	5 0	28	30	33	35	36
(3)Decrease of Manpower	0	0	0	92	101	109	117	126	135	146	157	169	182
A CANADA	0135	1,500	0020	5077	1000		12,43	12007	13741	34416	15118	15848	16608
NET BENEFIT FLOW	-2010	1166-	6207-	104/	0067	11437	16471	+cnc r	12/21	2			
	NPV AT'C	NPV AT CUT-OFF RATE OF 12%	TE OF 12%		39430	, m	B/C RATTO:	2.32		eirr =	42.38%		
				ı									

ECONOMIC RATE OF RETURN (7/10): NET BENEFIT +10% CASE Table 14-5

											١				
'			1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	ECONOMIC COST	15	5157	13302	3855	4741	6320	3589	2968	2968	2968	2968	2968	2968	2968
	Linvestment Cost		5157	13302	3855	2087	3666	621	0	0	0	0	0	0	0
	(1)Facilities		1905	7081	0	0	£8	0	0	0	0	0	0	0	0
		Hardware purchase	1272	6216	0	0	295	0	0	0	0	0	0	0	0
		Auxiliary facilities	400	0	0	0	: :	0	0	0	0	0	0	0	0
		Transport Expenses	37	137	0	0	20	0	0	0	0	0	0	O	0
		Installation costs	23	¥	0	0	12	0	0	0	0	0	0	Ó	0
		Contingencies	173	43	0	0	360	0	0	0	0	0	0	0	0
	(2)Software		3211	6151	3785	2045	2948	809	0	0		0	0	0	0
		Basic software purchase	873	1771	0	0	129	0	0	0	Ç	0	0	0	0
		Software development	1356	2652	27.6	432	720	0	0	0	0	0	0	0	0
		System transition	0	0	576	288	240	336	0	Ö	0	0	0	0	0
		Testing	0	0	576	288	576	0	0	0	0	0	0	0	0
		Translators fee	256	384	544	384	448	96	0	0	0	0	0	0	0
		International travel	38	36	115	76	98	35	0	O	0	0	0	0	0
		Lodging/perdiem allowance	88	146	437	293	317	98	0	0	0	0	0	0	0
1		Contingencies	909	1162	565	284	432	55	0	0	0	0	0	0	0
4–'	(3)Other Expenses		41	5	52	42	31	13	,0	0	0	0	0	0	0
Γ-		Preoperating expneses	37	Z	ઢ	38	28	12	0	0	0	0	0	0	0
8		Contingencies	4	9	9	4	6	-	.0	0	0	0	0	0	0
							.*							, <i>i</i> .	
	2. Operating Costs		0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968
	(1) Variable Costs		0	0	0	50	26	43	43	43	43.	43	43	43	4
		Electric power charge	0	0	0	13	13	14	7	34	14	14	27	4	≍
		Telecom, line charge	0	0	0	13	13	29	59	29	29	29	29	53	53
	(2)Fixed Costs		0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
		Direct labor costs	0	0	0	49	49	49	49	49	49	49	49	49	49
		General overhead	0	0	0	31	31	31	33	15	31	31	£	31	£
٠,٠		Maintenance cost	0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
•		Office rental	0	0	0	20	8	20	8	20	20	20	20	20	20
						٠.									
	ECONOMIC BENEFIT	EFIT	0	0	0	12657	14508	16311	16969	17653	18364	19105	19876	20677	21512
2 -	(1)Decrease of Float	Cal	0	0	0	12547	14387	16180	16828	17501	18201	18929	19686	20473	21292
	(2) Abolition of Aviso	viso	0	0	0	18	20	22	24	26	**	33	33	35	8
ı	(3)Decrease of Manpower	anpower	0	0	0	26	101	109	117	126	135	146	157	169	182
					. •										
~1	NET BENEFIT FLOW	WO.	-5157	-13302	-3855	7916	8188	12722	14001	14685	15396	16137	16908	17709	18544
						L			ſL			L			
			NPV AT CL	NPV AT CUT-OFF RAT	E OF 12%:		39017	Ã	B/C RATIO:	2.05	ц	EIRR =	34.97%		

Table 14-5 ECONOMIC RATE OF RETURN (8/10): NET BENEFIT +20% CASE

				4					٦	1000 I	(322)		
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ECONOMIC COST	5157	13302	3855	4741	6320	3589	2968	2968	2968	2968	2968	2968	2968
Threstment Cost	5157	13302	3855	2087	3666	621	0	0	0	0	0	0	•
(1)Facilities	1905	7081	0	0	289	¢	0	0	0	0	0	0	0
Hardware purchase	1272	6216	0	0	295	0	0	0	0	0	0	0	?
Auxiliary facilities	504	0	0	0	0	0	0	0	0	0	0	0	0
Transport Expenses	37	137	0	0	20	0	0	0	0	0	O	0	0
Installation costs	23	**	0	O	12	3	0	٥	0	0	o	0	0
Contineencies	173	3	0	0	360	0	0	0	0	0	0	0	3
(2)Software	3211	6151	3785	2045	2948	809	0	0	0	0		0	0
Basic software purchase	873	1771	0	0	129	0	0	0	O ·	Ö	0	0	
Software development	1356	2652	972	432	720	0	0	0	0	0	0	0	0
System transition	0	0	576	288	240	336	0	0	0	0	0	0	0
Testing	0	0	576	288	576	0	0	0	0	0	٥.	0	.
Translators fee	256	384	\$4	384	448	.96	0	0	0	0	၁	0	0
International travel	38	36	115	76	98	35	0	0	0	0	0	0	0
Lodging/perdiem allowance	88	146	437	293	317	98	0	0	0	0	0	0	0
	009	1162	565	284	432	52	O	0	o	0		0	
1 (3)Other Expenses	41	92	07	42	31	13	0	0	Ο	0	0	0	Φ '
Preoperating expneses	37	J	5	œ.	87	12	.	0	0	0	0	0	0
Contingencies	4	9	9	4	m		0	0	0	0	0	•	•
				. :			- ;	. :			0	0,00	0
2.Operating Costs	0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	¥967
(1) Variable Costs	Ö	Φ	0	28	. 26	43	43	43	43	43	43	43	£ 3
Electric power charge	0	0	0	13	13	14	14	14	14	- 14	74	14	7,
Telecom, line charge	O	0	0	13	. 13	29	29	53	29	53	29	58	83
(2) Fixed Costs	0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct labor costs		0	Þ	49	49	49	49	49	46	49	49	49	49
General overhead	0	0	0	31	31	31	31	31	31	31	31	31	31
Maintenance cost	0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Office rental	٥	0	0	20	20	20	20	20	20	20	20	30	22
				٠				•			÷		
ECONOMIC BENEFIT	0	0	0	13797	15816	17782	18499	19244	20018	20826	21665	22538	23447
(1)Decrease of Float	0	0	0	13687	15695	17651	18358	19092	19855	20650	21475	22334	23227
(2)Abolition of Aviso	0	0	0	138	20	22	24	56	28	30	33	3.5	38
(3)Decrease of Manpower	0	0	0	25	101	109	117	126	135	146	157	169	浧
			٠.					-					7. 1
NET BENEFIT FLOW	-5157	-13302	-3855	9056	9446	14193	15531	16276	17050	17858	18697	19570	20479
) (٠	7002					<u> </u>	20000	÷	
	NPV AT CUT-OFF R	UI-OFF RAI	ATE OF 12%:	-	42886		B/C KALIO:	7.73	. 	UKK ≈ L	18.01%		-

Table 14-5 ECONOMIC RATE OF RETURN (9/10): NET BENEFIT -10% CASE

,												(UNIT: 1,000 USS)	(SSn)		
'			1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2002	2006	2007
	ECONOMIC COST	ST	5157	13302	3855	4741	63.20	3589	2968	2968	2968	2968	2968	2968	2968
	1.Investment Cost	Ŋ.	5157	13302	3855	2087	3998	621	0	0	0	0	0	0	0
	(1)Facilities		1905	7081	0	0	687	0	٥	0	0	0	0	0	0
		Hardware purchase	1272	6216	0	0	295	0 %	0	0	0	0	0.	0	•
		Auxiliary facilities	400	Ö	0	0	0	0	0	0	0	0	0	0	0
	٠.	Transport Expenses	37	137	0	0	20	0	0	0	0	0	0	0	0
		Installation costs	8	84	0	0	12	0	၁	0	0	C	0	0	0
		Contingencies	173	ŧ	0	0	360	0	0	0	0	0	0	0	0
	(2)Software		3211	6151	3785	2045	2948	808	0	0	0	0	0	0	0
		Basic software purchase	873	1771	0	0	129	0	0	0	0	0	0	0	9
-		Software development	1356	2652	972	432	720	0	0	0	0	0	0	0	Ç
		System transition	0	0	576	288	240	336	ò	0	0	0	0	0	Θ.
		Testing	0	0	576	288	576	0	0	0	0	0	0	0	9
-		Translators fee	256	385	54.5	384	814	96	0	0	0	0	0	0	0
		International travel	38	36	115	76	98	35	0	0	.0	0	Ó	0	9
		Lodeine/perdiem allowance	90 90	146	437	293	317	86	0	0	0	0	O	0	•
1		Contingencies	909	1162	565	787	432	55	0	0	0		0	0	0
4-	(3)Other Expenses)	41	8	92	45	31	13	0	0	0	0	0	0	0
T-		Preoperating expneses	37	3	3	38	28	12	0	, o ,	0	· •	0	0	0
10		Contingencies	4	9	9	ব	m	prod.	0	0	0	6	0	0	0
			:.		•										
	2.Operating Costs		0	0	0	2654	26.54	2968	2968	2968	2968	2968	2968	2968	2968
.:	(1) Variable Costs		0	0	0	56	26	43	43	43	43	43	43	43	43
		Electric power charge	0	0	0	13	13	7.7	14	14	14	14	14	7	77
		Telecom, line charge	0	0	0	13	13	52	53	53	29	29	29	59	50
	(2)Fixed Costs		0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
		Direct labor costs	0	0	0	4	67	49	49	40	49	49	49	94	49
		General overhead	0	0	0	31	31	31	31	31	3	3.	31	31	31
		Maintenance cost	0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
1	Charles and the second second	Office rental	0	0	0	20	20	20	20	30	8	20	20	20	20
-	ECONOMIC BENEFIT		0	0	0	10375	11892	13369	13909	14471	15054	15663	16296	16955	17640
	(1)Decrease of Float	lozi	0	٥	0	10265	117711	13238	13768	14319	14891	15487	16106	16751	17420
	(2) Abolition of Aviso	lviso	0	0	0	138	20	22	24	26	28	30	33	35	86
7	(3)Decrease of Manpower	fanpower	0	0	0	65	101	109	117	126	135	146	157	691	182
										٠.					
1	NET BENEFIT FLOW	(OW	-5157	-13302	-3855	5634	5572	9780	10941	11503	12086	12695	13328	13987	14672
1 % - 1 %			,			Ü									
			NPV AT CUT-OFF RA		J: OF 12%:	<u>-</u>	25278	a	B/C RATIO:	1.68		BIRR =	28.13%		

Table 14-5 ECONOMIC RATE OF RETURN (10/10): NET BENEFIT -20% CASE

										CONT TIMO	CSO			
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
ECONOMIC COST	5157	13362	3855	4741	6320	3589	2968	2968	2968	2968	2968	2968	296K	
1 Investment Cost	5157	13302	3855	2087	3666	621	0	0	0	0	0	0	0	
(1)Facilities	1905	7081	0	0	. 687	0	0	0	0	0	0	0	0	
Hardware purchase	1272	6216	0	0	202	9	0	0	O	0	0	0	9	
Auxiliary facilities	00+	ວ	0	0	0	0	· ·	0	0	0	0	0	0	
Transport Expenses	37	137	0	0	20	0	0	0	0	0	0	0	0	
Installation costs	23	2 6	0	0	12	0	0	0	0	0	0	0	0	
Contingencies	173	3	0	0	360	0	0	0	0	0	0	0	0	
(2)Software	3211	6151	3785	2045	2948	808	0	0	0	0	0	0	0	
Basic software purchase	873	1771	0	0	129	0	0	0	0	0	0	0	5	
Software development	1356	2652	972	432	720	0	0	0	0	0	0	0	o ·	
System transition	0	0	576	288	240	336	0	0	0	0	0	0	0	
Testing	0	0	576	288	576	0	0	0	0	0	0	0	0	
Translators fee	256	384	\$. 4.	384	448	96	0	0	0	0	0	0	0	
International travel	38	36	115	76	98	35	0	0	0	0	o	0	0	
Lodging/perdiem allowance		146	437	293	317	98	0	0	0	0	0	0	0	
Contingencies	009	1162	565	284	432	55	0	0	0	0	0	0	0	
(3)Other Expenses	41	2	8	42	31	. 13	0	0	0	0	0	0	0	
Preoperating expneses	37	3	3	38	28	12	0	0	0	0	0	0	0	
Contingencies	4	9	. 9	4	m		0	0	0	0	o ,	0	0	
Carratina Costs	-		· c	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968	
Coperation Costs	,		o c	36	36	43	43	43	4.5	43	43	43	43	
(1) valiable wools		s c) C	3 5	3 2	1 4	7.7	5 7	51	4	14	14	14	
Televisia charas) C		o c		2 5	20	29	29	29	29	29	. 29	29	
(2) Fixed Costs) C	o C	0.0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925	
Direct labor costs		0	0	67	49	49	46	49	49	. 49	49	49	49	٠
General overhead	0	0	0	31	31	31	31	31	31	31	31	31	31	
Maintenance cost	0	0	٥	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825	
Office rental	0	0	0	20	20	20	20	20	20	20	20	30	20	
ECONOMIC BENEFIT	c	0		9235	10584	11898	12379	12880	13400	13942	14507	15094	15705	
(1) Degrees of Float		c	0	9125	10463	11767	12238	12728	13237	13766	14317	14890	15485	
(2) Abolition of Aviso			. 0	18	23	22	22	26	28	30	33	35	38	
(3)Decrease of Manpower	0	0	·O	92	101	109	117	126	135	146	157	169	182	
NET BENEETT FLOW	-5157	-13302	-3855	4494	4264	8309	9411	9912	10432	10974	11539	12126	12737	

Table 14-6 ECONOMIC RATE OF RETURN (SUMMARY OF SENSITIVITY ANALYSIS)
AND RESULT OF INVESTMENT AND BENEFIT COMBINED ANALYSIS

		-30 %	-20 %	-10 %	Base (0 %)	+10 %	+20 %
Investment							
	EIRR(%)	42.38	38.16	34.65	31.66	29.08	26.81
	NPV(\$000)	39,430	37,003	34,575	32,148	29,720	27,293
	B/C Ratio	2.32	2.14	1.99	1.86	1.75	1.65
Net Benefit							
	EIRR(%)		24.32	28.13	31.66	34.97	38.09
	NPV(\$000)		18,409	25,278	32,148	39,017	45,886
	B/C Ratio		1.49	1.68	1.86	2.05	2.23

Note: 12 % of Net Present Value (NPV) cut-off rate has been applied.

	INVESTMENT	+10%	+20%	+30%
BENEFIT				
-10%	EIRR(%)	25.70%	23.55%	21.65%
	NPV(1000\$)	22,851	20,424	17,996
	B/C RATIO	1.58	1.49	1.40
-20%	EIRR(%)	22.04%	20.04%	18.25%
	NPV(1000\$)	15,982	13,554	11,127
	B/C RATIO	1.40	1.32	1.25
%0E-	EIRR(%)	18.05%	16.18%	14.52%
	NPV(1000\$)	9,112	6,695	4,258
	B/C RATIO	1.23	1.16	1.10

Table 14-6 ECONOMIC RATE OF RETURN (2/10): +10, -10% CASE

14622 4241 4350 4357 4361 2068 2968			2001	2001	1007	0000	000	0000	2001	COOC	2003	2007	2005	2006	2007
Control Cont			CKK	1990	1997	1996	1999	2000	1007	2000	2000	0300	3700	3068	396.
Upscalities	ECONOMIC COST		5673	14632	4241	4950	608/	3651	9067	2067	9067	9067	2200	3	
Configuration cases	1.Investment Cost		5673	14632	4241	2296	4033	683	D	0	5	-	.	-	> <
Interview purchase 1999 6838 0 0 225 0 0 0 0 0 0 0 0 0	(1)Facilities	> -	2096	77.89	c	c	756	0	0	~	C	0	c	3	3 . !
Transport Department 151			1300	SK XA	C	0	325	C	0	c	c	C	0	0	C
Transport Exponence	Aneilien facilities		440		· c	· c	5		c	0	c	6	C	0	C
Interpret Laybures 21 21 21 21 21 21 21 2	Comment of the commen		} -				. 8				c	· C	c	c	0
Chairliant costs 25	Iransport Expenses		41	151	- -	?	77	-	> 1	-				; c	
Consideracies 150 708 6 6 6 6 6 6 6 6 6	Installation costs		, 33	25	c	0	13	0	3	=	3	a (> (- 0	
Software development 1492 2917 1069 415 1343 669 6 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	Contingencies		190	70 <u>8</u>	c	C	396	0	0	0	-	<u>-</u>	•)	٠ د
Solverse purchase Section 1948 10 10 142 10 10 10 10 10 10 10 1			3532	9929	2014	2250	3243	699	0	0	c	0	C	c	-
System transition 1 of 6 decisional state of		chase	096	1948	c	0	142	0	c	C	<u> </u>	c	0	c	<u> </u>
Transition 0 0 0 0 0 0 0 0 0	Software developme	ical.	1492	2917	1069	475	792	0	c	0	c	0	C	c	0
Traiting	System transition		c	c	67.9	317	264	370	<u>-</u>	C	0	0	c	<u> </u>	0
Transitions Loging percent allowance 42 402 598 422 493 106 0 0 0 0 0 0 0 0 0	euise				85	317	634	C		C	C	0	0	0	0
International lives	Translator (se		2.00	, c	005	3	707	300	; c		· C		0	0	0
International linyed 42			707	77	960	776	C 4	3 8	> (3 (> c) (C		<u></u>
Conjugation	International travel		747	40	171	Z.	ડ	₹,	>	3 (> (0	.	, c	
Conditional Continue Continu	Lodging/perdiem al	llowance	2	161	481	322	349	95 25	0	<u> </u>	0,	.	> (> (> C
Contingencies			099	1278	622	312	475	. 61	0	0	0	0	0	0 4	> 0
Propoperating cxpncscs	(3)Other Expens		\$	11	77	46	<u>¥</u>	14	0	0	0	0	0	>	- (
Contingencies 2 Operating Coasts 2 Operating Coasts 2 Operating Coasts 2 Operating Coasts 3 1 1 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		3505	4	5.	8	42	6	13	0	0	Ç.	Φ,	0	-	3 6
Operating Costs Coperating Costs 0 0 2654 2654 2968			.▼	7.	1	4	t.s	-	0	0	0	.	0	0	-
Deciric power charge				. :					1.		:		0	,	9900
Comparison	2.Operating Costs.		C	0	0	2654	2654	2968	2968	2968	2968	2968	2968	9967	90,67
Color Colo	(1) Variable Costs		0	0	٥	8	56	£.	5	43	43	4	53	; ;	
New The charge 0 0 0 13 13 29 29 29 29 29 29 29 2	Electric power chan	rge	0	ο,	0	13	13	14	14	14	14	7	14	4 :	₫ (
Paper consists O O O O O O O O O	Telecom, line char	ວລຸ	0	0	0	13	13	23	53	53	8	29	67	53	53
labor costs		3	0	0	0	2628	2628	2925	2925	2925	2925	. 2925	2925	2925	2925
Solution O	Direct labor costs	-	0	0	0	49	49	6	49	49	49	49	49	49	49
Constitute	General overhead		C	C	0	33	31	33	31	E	31	33	31	3	31
Tental 0	Maintenance cost		0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Color	Office rental		0	0	0	53	20	50	20	20	20	20	20	20	97
Color Colo					į	٠.	É					. (, , ,	1006	17640
wer 0 0 0 10265 11771 13238 13768 14319 14891 15487 16106 16751 16706 16706 16751 16706 16	ECONOMIC BENEFIT		0	o ,	0	10375	11892	13369	13909	14471	15054	15663	16290	00001	240/1
Wer 0 0 0 18 20 22 24 26 28 30 33 35 35 35 36 37 35 35 35 35 35 36 37 35 35 35 35 35 35 35 35 35 35 35 35 35	(1)Decrease of Finat		0	0	0	10265	11771	13238	13768	14319	14891	15487	16106	16/91	1/420
wer 0 0 0 92 101 109 117 126 135 146 157 169 -5673 -14632 -4241 5426 5206 9718 10941 11503 12086 12695 13328 13987 NPV AT CUT-OFF RATE OF 12%: 22853 B/C RATIO 1.58 EIRR = 25.7093	(2)Abolition of Aviso		0	٥	0	18	8	22	24	8	8	30	33	8	€.
-5673 -14632 -4241 5426 5206 9718 10941 11503 12086 12695 13328 13987 NPV AT CUT-OFF RATE OF 12%: 22853 B/C RATIO 1.58 EIRR = 25.7093	(3)Decrease of Manpower		0	0	0	8	101	109	117	126	135	146	157	169	182
-5673 -14632 -4241 5426 5206 9718 10941 11503 12086 12695 13328 13987 NPV AT CUT-OFF RATE OF 12%: 22853 B/C RATIO 1.58 EIRR = 25.7093					:										,
FFRATE OF 12% : Z2851 B/CRATIC 1.58 EIRR	NET BENEFIT FLOW		-5673	-14632	-4241	\$4.26	5206	97.18	10941	11503	12086	12695	13328	13987	146/2
FF RATE OF 12%: 22851 B/C RATIQ 1.589 EIRK								-1					26 700		
		•	NPVATO		ATE OF 12		22851	E .	/CRATIQ∟	1.580	-		D.1078		

Table 14-6 ECONOMIC RATE OF RETURN (3/10): +10, -20% CASE

1771 1779 2001 2004 4241 4950 6687 3651 2968 2968 4241 2296 4033 683 0			3000	2001	1007	0001	0001	0000	1000	2000	2)	2007	2006	2006	2007
Sofia 14622			1272	1990	122	1220	1333	AUVU)	2011	7007	2002	200	1000	200	5
Section Sect	CONOMICC	OST	5673	14632	4241	4950	6687	3651	2968	2968	2968	2968	2968	2968	2067
2096 7789 0 756 0 0 0 0 0 0 0 0 0	1.Investment (Pod.	5673	14632	4241	2296	4033	683	0	0	0	0	0	0	C
Participace 1399 6838 0 0 325 0 0 0 0 0 0 0 0 0	(1)Facilities		2096	7789	0	0	756	0	0	0	0	0	0	0	0
ing fiedlities		Hardware purchase	1399	6838	o	0	325	O	o	0	0	O	0	•	0
Point Expenses 151 0 0 22 0 0 0 0 0 0)) () ()	Auxiliary facilities	440	0	0	.0	0	0	0	0	0	6	0	0	0
Soliton costs 125 725 0 0 133 0 0 0 0 Soliton costs 1390 708 0 0 142 0 0 0 0 Solitonarce 2506 1948 0 0 142 0 0 0 0 Solitonarce 2507 1948 0 142 0 0 0 0 Banos Rec		Transport Expenses	41	151	0	0	z	0	0 :	0	0	0	0	0	-
Solitorate 3532 6766 4164 2250 3343 669 0 0 0	•	Installation costs	23	z	0	0	13	0	0	0	O	O	0	0	-
3532 6766 4164 2250 3243 669 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Contingencies	190	708	0	0	396	0	0	0	0	ဝ	0	0	
solivazio prichase 960 1948 0 142 0 142 0 0 0 0 142 0	(2)Software)	3532	9929	4164	2250	3243	699	0	0	0	¢	0	0	0
are development 1492 2917 11069 475 792 0 0 0 0 0 0 634 317 264 370 0 0 0 0 0 64 1317 264 370 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Basic software purchase	096	1948	0	0	142	0	c	0	0	c	0	0	•
The control of the		Software development	1492	2917	1069	475	792	C	C	0	0	0	c	0	0
Second		System transition	0	0	634	317	797	370	G	0	0	0	0	0	0
Second Color		Testing	0	0	634	317	634	0	0	0	0	0	C	0	0
ational travel 42 40 127 84 95 39 0 0 autional travel 97 161 481 322 349 95 0 0 ngencies 660 1278 622 312 475 61 0 0 crating expnexes 41 70 70 42 31 13 0 0 ngencies 4 7 7 4 31 14 0 0 ngencies 4 7 7 4 31 13 0 0 ngencies 0 0 2654 2654 2968 2968 2968 ngencies 0 0 0 2654 2654 2968 2968 2968 ngencies 0 0 0 2654 2654 2968 2968 2968 2968 no 0 0 0 262 26 43 43 </td <th></th> <td>Translators fee</td> <td>282</td> <td>423</td> <td>598</td> <td>422</td> <td>493</td> <td>106</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>-</td>		Translators fee	282	423	598	422	493	106	0	0	0	0	0	0	-
ng/perdiem allowance 97 161 481 322 349 95 0 0 ngencies 660 1278 622 312 475 61 0 0 ngencies 660 1278 622 312 475 61 0 0 ngencies 660 1278 622 34 14 0 0 ngencies 4 7 70 70 42 31 13 0 0 ngencies 0 0 2654 2654 2968 2968 2968 ngencies 0 0 0 2654 2654 2968 2968 2968 nm. line charge 0 0 0 26 43 43 43 43 nin line charge 0 0 0 2628 2628 2925 2925 2925 ni noverhead 0 0 2628 2628 2628 2826		International travel	42	9	127	Z	አ	36	0	0	0	0	0.	6	•
According expinests Case		Lodging/perdiem allowance	76	161	481	322	349	2 5	0	0	ö	0	0	0	0
45 77 77 46 34 14 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0		Contingencies	099	1278	622	312	475	19	0	0	0	, c	0	0	·
regulage exponences 41 70 70 42 31 13 0 0 0 ngencies 4 7 7 7 4 3 1 13 0 0 0 ngencies 1 0 0 0 2654 2654 2968 2968 2968 2968 2968 2968 2968 4 3 43 43 43 43 43 43 43 43 43 44 14 14 14 14 14 14 14 14 14 14 14 14	3)Other Expe		45	F	11	46	8	14	0	0	0	0	0	0	.
December December		Preoperating expnesses	41	2	92	42	E	13	0	0	0	0	0	0	_
ic prower charge 0 0 2654 2654 2968		Contingencies	*	7	7	*	m	1-4	0	0	0	0	0	•	-
10					ć		1370	600	0.00		9,000	ç	9706	0,700	300
ic power charge 0 0 26 26 43 43 43 om. line charge 0 0 0 13 13 14<	2 Seminary		-	-	> '	203	4074	90.67	90.67	9067	9067	73,00	9067	967	3
time charge 0 0 13 13 14	(I)Variable C	###	0	0	Φ,	97	25	43	43	4.3	4	54 .	43	÷.	3
orn. line charge 0 0 13 13 29 49 40		Electric power charge	0	0	0	. 33	13	14	₹:	14	14	<u></u>	*	Z (4 8
Labor costs 0	1		0	.	0	13	13	Žì	62	53	63	£3	2	Q	G
labor costs	(2) Fixed Costs		0	0	c	2628	2628	2925	2925	2925	2925	2925	2925	2925	292
Second S		Direct labor costs	0	0	0	49	49		49	49	49	64	49	49	₹
Construct Cast 0		General everhead	0	0	¢	31	31	3	31	31	31	31	31	31	m
Trinial 0 0 0 20 20 20 20 20 20 20 20 20 20 20		Maintenance cost	0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	282
Color		Office rental	c	0	0	20	20	20	20	20	20	20	02	20	8
100 0 0 0 0 0 0 0 0	CONOMIC		•	•		,	70301	9001	0.501	17000	12400	13047	14507	15004	1470
wer 0 0 0 18 20 22 24 26 20 0 0 92 101 109 117 126 126 127 126 126 127 126 126 127 126 126 127 126 126 127 126 126 127 126 126 127 126 127 126 127 126 127 126 127 126 127 127 127 127 127 127 127 127 127 127	(i)Decrease of		> =	•		2010	10463	79211	17738	12728	13237	75661	14317	14890	15485
wer 0 0 92 101 109 117 126 -5673 -14632 -4241 4285 3898 8247 9411 9912	(2) Abrahition o	Avien	• •] =	66	3 6	A.221	92/21	100			35	ř
-5673 -14632 -4241 4285 3898 8247 9411 9912	(3)Decrease of	Manower	•	-		e 8	3 5	3 2	5 <u>[</u>	3 2	3 5	₹ 94	157	3 69	182
-5673 -14632 -4241 4285 3898 8247 9411 9912															
Party is view and the second	NET DENET	LFLOW	-5673	-14632	-4241	4285	3898	8247	9411	9912	10432	10974	11539	12126	12737
CITY II CALL							*		. (<u>l</u>	<u> </u>		
KAJE OF 12% : L33824 55/C KAJIN			NPV AT CUT-OFF		RATE OF 12%	 %	15982	ij	B/C RATIO	1.40}	<u>ய</u>	EIRR = [22.04%		

Table 14-6 ECONOMIC RATE OF RETURN (4/10): +10, -30% CASE

		i , -)				•		7		(SSU 000,		
	1905	1996	1997	X601	0001	2000	2001	2002	2003	2004	2005	2006	2007
	12.7	,,,,,	,,,,,	1		1,2,0	5,00	3	3000	306	20KK	X962	2968
ECONOMIC COST	5673	14632	424]	4550	1909	1006.	9067	90.67	0067	1000			
1.Investment Cost	5673	14632	4241	2296	4033	83	0	0	2	2	a (5 (> 0
(1)Facilities	2096	7789	C	0	756	C	-	c	C;	0	0	-	> (
Hardware norchase	1399	6838	0	0	325	C	0	0	0	0	0	0	-
Auxiliary facilities	440	_	c	0	C	C	c	0	0	0	C	c	c
Transport Expenses	4	151	. C		22	0	0	0	0	c	6	0	C
Installation costs	25	6	C	0	13	C	C	0	0	0	c	0	0
Contingencies	<u>8</u>	708	C	0	396	o	c	0	C	0	c ·	c	c;
(2)Software	3532	6766	4164	2250	3243	699	0	c	C	0	C	0	0
Pacir enflivare number	090	1948	_	,	142		C	C	C	C	0	0	c
Software development	1497	2917	1069	475	702	· c	c	0	C	C	0	0	0
Svetem transition			PE9	217	264	370	C	©	0	0	0	á	C
Testing			5	317	634	0	c	0	C	c	0	0	¢
Translators [cc	282	422	598	422	493	106	C	0	0	0	C	0	c ,
International travel	42	9	127	æ	8	39	C	0	0	C	, 0	0	0
Lodging/perdiem allowance	76	161	481	322	349	95	0	0	0	0	0	0	- -
	099	1278	622	312	475	19	C	to.	0	C.	D	0	Ċ (
(3)Other Expens	45	77	11	46	*	14	0	0	0	0	0	0	> (
Preoperating expneses	41	70	20	42	31	13	0	0	0	0	Ö	o (- (
Contingencies 15	4	7	7	4	r.	~	C	0	0	~	Ö	.	-
1.		• •				,					;		
2.Operating Costs	0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2067
(1)Variable Costs	O	0	0	26	56	43	43	43	43	43	43	£ ;	4
Electric power charge	0	c	0	13	13	14	14	14	4.	14	14	<u> </u>	4 6
Telecom. line charge	0	0	0	13	13	53	29	83	83	23	53	53	5
(2)Fixed Costs	0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct labor costs	0	0	0	49	49	49	49	49	49	49	46	49	,
General overhead	0	0	c	31	16	33	31	31	3	31	31	31	300
Maintenance cost	0	C	C	2528	2528	2825	2825	2825	2825	22.2	2825	38	77
Office rental	C	0	0	82	20	8	20	20	8	20	707	70	Q.
ECONOMIC BENEFIT			C	8094	9276	10427	10850	11289	11745	12222	12717	13232	13769
(1)Decrease of Float	O	0	c	7984	9155	10296	10709	11137	11582	12046	12527	13028	13549
(2) Abolition of Aviso	0	0	0	18	20	22	24	50	8	30	33	35	**
(3)Decrease of Manpower	0	0	C	25	101	109	117	126	135	146	157	169	182
NO LE SUR REPLACEMENT DE LA COMPANION DE LA CO	64.73	2677	. VCF	77.6	0030	7447	5	1000	2777	7560	0749	10264	10801
NO DISTOLLE TIXA	5700-	70047-	1+7+	3744	23%0	0//0	7007	0.764	1770				
	O-THO TA VAN	CHT-OFF R	FFRATE OF 120	<u>.</u>	0112	ď		1 23	-	EIRR =	18.05%		
	***		:		[4447	•]		ı				

Table 14-6 ECONOMIC RATE OF RETURN (5/10): +20, -30% CASE

		-							1	1,000	(2.5)		
	1995	9661	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ECONOMIC COST	6188	15962	4626	5158	7053	3713	2968	2968	2968	2968	2968	2968	2968
I Investment Cost	6188	15962	4626	2504	4399	745	0	0	0	0	C	c	c
(1)Facilities	7286	8497	C	0	824	0	0	0	0	0	0	0	0
Hardware mirchase	1526	7459	- C	O	354	0	0	0	C	0	0	0	c
Auxiliary facilities	480	g	~	0	0	.0	0	0	0	0	C	C	0
Transport Expenses	2	. ¥	0	0	25	0	6	О	0	0	0	0	0
Installation costs	89	101	0	0	14	0	0	0	0	0	0	0	0
Contingencies	208	773	0	0	432	0	0	0	Ö	0	c	0	् ् ्
(2)Software	3853	7381	4542	2454	3538	730	0	0	0	0	C	0	0
Basic software purchase	1048	2125	o	0	155	-	0	Φ.	o	C	c	c	C .
Software development	1627	3182	1166	518	86	-	C	C	C	0	0	0	0
System transition	C	0	(69	346	238	403	0	0	0	0	6	0	0
Testing	0	0	691	346	169	0	0	C	c	0	0	0	<u> </u>
Translators fee	307	461	653	461	538	115	0	0	0	0	0	0	0
International travel	46	43	138	5	103	42	0	0	0	0	0	0	~ (
Lodging/perdiem allowance	106	175	524	352	380	103	0	0	0	Φ.	0	o (٥,
Contingencies	027	1394	829	341	518	99	0	0	0	0	0.	0	0
(3)Other Expens	64	æ	8	50	37	16	0	0,	0	0	Ċ,	0	0
Preoperating expneses	4	11	11	46	z	14	0	0	0	0	0	0	0
	s	7	. L	S	4	-	0	0	Ω.	0	0	0	0
	•		•			9000	0,00	9900	ayuc	3706	3200	2068	2000
Z-Operating Coxis	0	D (-	7024	467	9967	2967	9067	400	9067	7700	567	30.07
	o (0	⊃ !	3 9	9 :	đ	43	÷:	7	7	? :	? ?	} =
Deciric power charge	0	0	G	<u>. 13</u>	13	14	4 (4 (14	6 (<u> </u>	. ?	! ?
Telecom, line charge	0	C	C	13	13	62	29	62.5	67 00	57 00	67 CC	67.00	\$7 OC
(2)Fixed Costs	C .	0	0	2628	2628	2925	2925	2925	2925	2922	367	33	
Direct labor costs	C	C	C	49	49	49	49	49	94.	45		4 t	÷ ;
General overhead	0	C	0	31	F	E	E		31	15.	15	2000	1000
Maintenance cost	C (~ (C (2528	2528	2825	2825	282	282	3 2	287	3 5	3 6
Office rental	0	o	0	71)	87	3	O?	(2)	67	40	(17	60	77
ECONOMIC BENEFTF	d	G	0	8094	9276	10427	10850	11289	11745	12222	12717	13232	13769
(1)Decrease of Float) C		7984	9155	10296	10709	11137	11582	12046	12527	13028	13549
(2) Abolition of Aviso	0	0	0	32	20	22	24	26	28	30	33	35	38
(3)Decrease of Manpower	0	0	0	92	101	100	117	126	135	146	157	169	182
				-							3 3		
NET BENEITT FLOW	-6188	-15962	-4626	2936	2223	6714	7882	8321	7777	9254	9749	10264	10801
	NPV AT CUT-0		FF RATE OF 12%	<u></u>	6685		B/C RATIO	1.16		EIRR =	16.18%		
	1		-)						

Table 14-6 ECONOMIC RATE OF RETURN (6/10): +20, -20% CASE

				*						UNIT TIME	(2)	,,,,,	1000
	1995	1996	1997	1998	1999	2000	2001	2002	2003	20114	2007	CUMO	2
ECONOMIC COST	6188	15962	4626	5158	7053	3713	2968	296X	2968	2968	2968	2968	2968
1 Investment Cast	6188	15962	4626	2504	4399	745	0	0	C	0	0	0	0
(Diacilities	2286	8497	0	C	824	0	C	C	C	c	c	c	C
Ilardware chirchase	1526	7459	0	0	354	0	0	0	6	0	0	0	c i
Auxiliary facilities	480	C	0	0	0	0	0	c	0	0	C (c (-
Transport Expenses	4	164	C	C	54	C	C	c c	C	C	C	o (-
Installation costs	83	101	0	0	14	C	Ċ	0	0	0	0	c	= 0
Contingencies	208	773	c	0	432	0	0	0	6	c :	0	-	> (
(2)Software	3853	7381	4542	2454	3538	730	0	0	0	C .	0	0	.
Basic software purchase	1048	2125	0	c	155	C	0	0.	C	0	c	0	- (
Software development	1627	3182	1166	518	8 64	0	0	0	0	0	0	0	3 (
System transition	0	C	691	346	288	403	0	0	0	0	0	D	
Testing	0	0	691	346	691	0	0	0.	0	0	0	0 (- `
Translators for	307	461	653	461	538	115	c	0	0	C	0 (-	- `
International travel	46	43	138	16	103	42	0	0	0	0	0	-	
Lodging/perdiem allowance	106	175	524	352	380	103	0	٥	0	0	O (-	
	720	1394	678	33	518	99	0	0		O 1	01	o (
(3)Other Expenses	49	ž	\$	S	37	16	0	c ·	0	0	0 (- 0	
1 Preoperating expneses	4	77	H	46	¥	14	0	0	<u> </u>	o	= (- (
Contingencies 17	Ň	7	7	ν,	4		c	0	0	0		=	- "
	. 1				. 1	į				3700	8900	3048	2068
2.Operating Costs	c	c .	0	2654	2654	2968	2968	2968	8067	9067	9067	9067	43
(1)Variable Costs	•	C	C	%	56	43	.	£ :	£ :		. <u>.</u>	2	
Deciric power charge	•	O	c	13		4	<u> </u>	14	₹ 6	± 6	r c	, 6	
Telecom, line charge	- 4	-	C (<u> </u>	2	62.5	8 6	67 66	K7 C	2000	2000	2000	29.
(z)rixed Costs	- (= (اد	8797	2078	C7 67	C7 67	3 5	45	9	40	40	1. 4
Direct labor costs	9	-	-	<u>4</u>	49	4 ,	\$:	, 4, 5	λ· (-	ŕř) -	3 6	31
		-	= 0	i c	15.05	נה ארשר	, veac	2825	2825	2825	2825	2825	282
Office rental	.		o c	§ 2	3 2	25	3 8	8	20	20	30	30	20
ECONOMIC BENEFIT	C	_ c	-	9735	10584	11898	12379	12880	13400	13942	14507	15094	15705
(1)Decrease of Pipat		, C	,	9175	10463	11767	12238	12728	13237		14317	14890	15485
(2) Abolition of Aviso	0	0	0	? ≃	202	22	24	38	85		æ	33	38
(3)Decrease of Manpower	0	0	0	8	101	109	117	126	135	146	157	169	182
MET RECHIFICE UM	3819	-15067	7634	AT04	1631	2818	1179	9917	10432	10974	11539	12126	127
TARKET TO THE TARKET	0010-	70651-	0706	0/04	1000	Poro							
	NI'V AT CUT-0		FF RATE OF 12%		13554	a	B/C RATIO	1.32)		EIRR =	20.04%		

ECONOMIC RATE OF RETURN (7/10): +20,-10% CASE (UNIT: 1,000 US Table 14-6

ECONOMIC COST 1.Investment Cost (1)Facilities Ilardware purchase Auxiliary facilities Transport Expenses									-	(SKU 000,1:1:NU)	(Sec)			· .
NOMIC COST vestment Cost facilities Ilardware purchase Auxiliary facilities Transport Expenses	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	
<u> క</u>	6188	15962	4626	5158	7053	3713	\$9 \$2	2968	2968	2968	2968	2968	2968	
	6188	15962	4626	2504	4399	745	0	0	0	•	0)	> (.:.
	2286	8497	0	0	824	0	6	0	•	0	0	3)	- (*
Auxiliary facilities Transport Expenses	1526	7459	0	0	354	0	0	0	0	0	0	0	>	
Transport Expenses	480	0	0	D	0	0	0	0	0	c	C	0	cʻ	
	4	164		0	8	C	0	0	0	0	0	c	e	
Installation costs	87	101	0	0	71	C	0	0	0	0	0	0	0	
Contingencies	208	773	Ö	C	432	0	0	0	0	0	0	0	0	
(2)Software	3853	1381	4542	2454	3538	730	0	0	0	0	c	0	c	
Basic soliware purchase	1048	2125		0	155	0	0	C	o	0	0	c	0	ď.
Software development	1627	3:5	9911	518	8 64	0	0	0	0	0	0	0	c	
Section transition		·	109	378	288	403	0	0	0	0	0	0	0	
Tenting		, c	5 69	346	69	C	C	0	0	0	0	0	c	
Special Control of the Control of th		76.	100	461	220	¥ 1	–	0	C	0	0	0	0	
I THINGIS ICC	307	Ç	5	Į,	1000	64	÷ =	• •	0	0	0	0	0	
	7 7	£ 5	975	250	696	3 5	· c			c	0		0	
The grant and a second a second and a second a second and	9 6	7,000	7 7 7	100	200	ž	,	9	c	C	C	0	C	
Connectors	07/	15%	6/9	*	010	3 .	> 0	: c	· c	· -		-	c	٠.
(3)Other Expenses	2	S [Z i	ָ ה	2.5	9 :		o C	· c				C	
Licoberging expanses	\$; '	, ·	\$:	Ž.	†	-	> <	• •	÷ C		· C	· c	
Contingencies	v	7	L :	v.	4	7	.	>	>	>	>			
	. •	. (6	0,00	2000	3900	8700	2068	2068	
2.Operating Costs	0	o (0	2654	2654	2968	2002	9067	9067	6700	0067	2,4	43	
(I)Variable Costs	• •	c (-	8	8	4	6	9 7	? :	? ?	<u> </u>	1) <u>T</u>	
Electric power charge	•	0	G	<u>m</u>	£1 '	14	Z (4 6	1 (÷ 6	י כ	. 2	Š	
Telecom, line charge	C	-	0	13	13	52	R1 (2000	67	2000	2000	2000	2000	
(2) Fixed Circles	•	O.	0	262K	2628	282	262	2767	0.63	(7/7		1	9	
Direct labor costs	0	0		6 4	49	64	4 j		2	7	, ,	7 7	<u> </u>	
General overhead	0	C	-	31		E.	Ē		7	1000		, icac	3000	:
Maintenance cost	0	0	6	2528	2528	2825	2825	2825	282	797	797	3 6	107	
Office rental	0		C	20	33	20	20	200	707	70	(1)	717	113	
	¢	•	•	4.00	00011	07661	12000	17771	14044	15663	16206	16055	17640	
SCUNOMIC DENERIL	- (-	10373	7,017	1000	13303	1777	14801	15487	90191	18791	17420	ď
	a ·	-	-	10707	11/11	66761	2,00	K10+1	74047	5	22	35	32	
Z)Abolition of Aviso	-	-	2	≊ 8	3	77	4 ;	9	8 55	746	157	169	52	
Silvecters of Manpower				22	Ini	109	,	071	7:37			777		
		200	1	<u> </u>	0607	9990	1,000,1	11 503	12085	30961	11328	13987	14672	-
MET DENIETT TAKE	-0100	70461-	-4050	1170	40.38	0.000	10243	1777	NW T					
	Nev AT OTH ORE BATH 032	TT_OFF 9.	ATE OF 12	<u>ٿ</u> لا	20424	#	IN RATHO	1 40	bá.	ER H	23.55%			
		2	7		157507		1							i.
							,					٠	- 4 	
				٠.										
								:						
					1									

Table 14-6 ECONOMIC RATE OF RETURN (8/10): +30, -10% CASE

									D	(UNIT: 1,000 USS)	USS)	-	
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ECONOMIC COST	6704	17293	5012	5367	7420	3775	2968	2968	2968	2968	2968	2968	2968
1.Investment Cost	6704	17293	5012	2713	4766	807	C	0	0	0	c	c	0
(1)Facilities	2477	9205	0	0	893	0	C	0	0	C	0	0	0
lardware purchase	1654	8081	0	0	38.	0	0	0	0	С	0	0	C
Auxiliary facilities	520	O	0	0	0	C	0	0	C	C	0	0	0
Transport Expenses	48	178	0	0	32	0	0	0	0	0	0	c	0
Installation costs	39	109	c	¢	16	0	C	0	0	0	0	C	0
Contingencies	225	837	0	C	468	0	0	0	0	C	0	0	Φ.
(2)Software	4174	9662	4921	2659	3832	790	0	0	c	C	0	C	O (
Basic software purchase	1135	2302	0	c	168	0	0	0	0	0	0	0	<u>٠</u> .
Software development	1763	3448	1264	562	936	0	0	0	, o	0	0	0	C
System transition	0	0	749	374	312	437	0	0	c	0	0.	0	0 '
Testing	0	С	749	374	749	C	0	0	0	0	c ·	0	0
Translators fee	333	499	707	499	282	125	0	0	0	0	0	0	₽. •
International travel	49	47	150	66	112	46	0	0	٥	0	0	0	-
	114	190	268	381	412	112	C	0	0	C	0	5	э с
ntingencies	780	1511	735	369	562	72	0	0	0	0	C	0	-
(3)Other Expens	53	61	6	55	40	17	0	0	0	•	0	.	• • • • • • • • • • • • • • • • • • •
	84	83	82	49	96	16	0	0	0	0	C 1	5	-
Contingencies	ò	œ	æ	٧,	4		0	¢	0		0	5	.
					```.							3 0	9,00
2.Operating Costs	0	0	0	2654	2654	2968	2968	2968	2968	2968	2962	2908	6067
(1)Variable Costs	<b>C</b>	0	0	56	8	43	43	43	43	43	£.4	Ċ,	7
Eccinic power charge	0	0	0	13	13	14	14	4	14	14	14	<b>4</b> 1	<b>4</b>
Telecom, line charge	C	0	c	13	. 13	23	53	53	53	52	29	53	25
(2)Fixed Costs	0	0	O	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct labor costs	0	0	0	49	49	49	49	49	49	45	49	49	49
General overhead	C	0	C	3	E	31	3	33	31	31	31	31	3
Maintenance cust	C	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
()ffice rental	0	C	0	92	20	20	20	23	92	20	92	20	20
			•						:	•			
ECONOMIC BENEFIT	0	0	0	10375	11892	13369	13909	14471	15054	15663	16296	16955	1/040
(1)Decrease of Float	0	0	0	10265	11771	13238	13768	14319	14891	15487	10100	16/91	1/420
(2) Abolilion of Aviso	Û	0	0	18	8	22	73	8	8	운 ]	8	35	<del>\$</del> \$
(3)Decrease of Manpower	0	0	0	2	101	109	117	126	135	146	157	169	781
NET BENEFIT IT.OW	-6704	-17293	-5012	2008	4472	9594	10941	11503	12086	12695	13328	13987	14672
· · · · · · · · · · · · · · · · · · ·		1	200	<u>[_</u>	70000	£	١				2) 650		
	O-100 IV AIR	3	FF KAIE UF 12%	<i>و</i> . ن	1920	ភ	INC KATIC	1.90	<b>-</b> 3.:	= XXI	10/C0777		

Table 14-6 ECONOMIC RATE OF RETURN (9/10): +30, -20% CASE

										(UNIT: 1,000 USS)	USS		
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ECONOMIC COST	6704	17293	5012	5367	7420	3775	2968	2968	2968	2968	2968	2968	2968
1. Investment Cast	6704	17293	5012	2713	4766	203	0	0	0	0	0	0	0
(1)Facilities	7477	5000	0	0	893	0	0	0	C	0	0	0	0
Therefore reprehense	1654	8081	· C	C	387	0	0	0	0	0	6	0	0
Auriliary familiar	Ş	1000	• •	· C	C	c	C	0	0	0	0	0	0
Transport Expenses	48	178			26	0	0	0	0	0	C	c	0
Indaliaion casts	Ę	100		C	16	0	c	0	0	0	0	c	0
Cartingencies	225	837		· C	468	0	0	0	0	0	C	0	0
(2)Software	4174	9662	4921	2659	3832	790	0	0	0	0	o	C	0
Basic software purchase	1135	2302	÷		168	0	0	0	0	0	0	0	<b>0</b>
Software development	1763	3448	1264	295	936	0	0	C	¢	0	0	0	0
System transition	0	0	749	374	312	437	C	0	0	0	<b>o</b>	0	0
Testing	0	0	749	374	749	0	0	0	0	0	0	0	0
Translators fcc	333	499	707	499	582	125	0	0	0	o,	0	0	0
Informational travel	49	47	150	8	112	46	0	0	0	0	0	0	<b>-</b>
Lodging/perdiem allowance	114	190	268	381	412	112	0	0	0.	0	0	0	c
Contingencies 4	780	1511	735	369	262	72	0	0	0	0	0	0	<b>•</b>
(3)Other Expens	53	91	91	55	40	17	0	0	0	0	0	0	<b>c</b>
Preoperating expneses	48	\$	æ	49	36	16	0	0	0	0	0	0	0
	<b>S</b>	· •c	pc.	ν,	₽		0	0	C	0	<b>-</b>	0	0
しょうかい はれる 勝い アンドラ こうちゅう													
2.Operating Costs	0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968
(1)Variable Costs	C	0	<b>C</b>	92	26	43	43	£3	43	43		43	<del></del>
Hedric power charge	<b>c</b>	0	C	13	n	14	74	4	74	7	7	<b>4</b>	*
•		0	0	13	E	81	ጼ	23	દ્ધ	28	23	23	23
(2)Fixed Costs	0	0	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	2925
Direct labor costs	0	0	C	49	49	49	49	49	49	49	49	40	\$
General everhead	<b>.</b>	0	<b>c</b>	3	.31	<u></u>	3	31	3.	33	31	31	F
Maintenance cost	0	c	C	2528	2528	2825	2825	2825	2825	2825	2825	2825	2825
Office rental	C	c	0	8	02	20	20	20	20	20	20	20	53
LECTION OF CONCESS							0,000	CBGC.	00761	12042	14507	14004	20721
CONTRACTOR CONTRACTOR	<b>⊃</b>	<b>)</b>	<b>-</b>	7235	PSC01	SVC.	12319	00071	DO4CT	75401	777	1,000	20121
(1)Degreese of Pinal	<b>-</b> '	0	<b>-</b>	9125	10463	11767	12238	12728	13237	13/66	14.317	14890	0.00 to 0.00
(2)/Dolltion of Aviso	<b>O</b>	0	<b>-</b>	8	30	22	47	9	3	2 ;	સ <b>!</b>	9 5	, .
(D)Decrease of Manpower	٥	0	0	26	101	109	1117	120	C£1	140	12/	107	701
NET BUNEFIT FLOW	-6704	-17293	-5012	3868	3164	8123	211	9912	10432	10974	11539	12126	12737
	***		2000	1									
	NPV AT CUT-0		F RATE OF 12%	<u></u>	11127	<b>F</b>	B/C RATIO	1.25	u)	EIKK =	18.25%		:
				J			J					•	

Table 14-6 ECONOMIC RATE OF RETURN (10/10): +30, -30% CASE

							:		٦	UNIT: 1,000	000 USS)		
	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ECONOMIC COST	6704	17293	5012	5367	7420	3775	2968	2968	2968	2968	2968	2968	2968
1.Investment Cost	6704	17293	5012	2713	4766	807	0	0	0	0	0	0	0
(1)Facilities	7477	5000		=	203	_	C		c	C	0	0	C
Conference organization (1)	7591	1000		•	786	c C	· c	; C	· C		c	C	0
A Callette	r c	Tope	> 0	•	.00.	> 0	> c	• •	· c	· c	· c	· C	C
Auxiliary lacillies	070	2	5	n (	<b>-</b> }	<b>S</b>	2 6	> 0	- 0	> <	s. C		
I ransport texpenses	<b>4</b>	178	3	<b>-</b>	ર્જી	<b>-</b>	<b>&gt;</b>	<b>&gt;</b> (	) 	s (	<b>&gt;</b> 0	<b>-</b> c	
Installation costs	£.	109	0	0	16	<b>c</b>	C	C	0	<b>&gt;</b>	<b>3</b>	) )	<b>&gt;</b> (
Contingencies	525	837	: <b>Q</b>	0	468	0	C	0	0	0	0	0	•
(2)Software	4174	9662	4921	2659	3832	790	0	0	0	0	0	0	0
Basic software purchase	1135	2302	0	C	168	0	C	0	c	0	0	0	<b>~</b>
Software development	1763	3448	1264	262	936	0	0	0	0	0	0	0	0
System transition	0	C	749	374	312	437	0	0	0	0	0	o :	0
Tesling	0	C	749	374	749	C	C	0	0	0	0	e	
Translators fee	333	499	707	499	582	125	0	0	0	c	0	C	
International travel	49	47	150	8	112	46	0	0	0	0	0	c	_
Lodging/perdiem allowance	114	190	268	381	412	112	0	0	0	0	0	<b>c</b>	_
Contingencies	780	1511	735	369	562	72	0	0	0	0	0	0	<u> </u>
(3)Other Expenses	53	5	5	SS	40	17.		0	0	O	0	0	_
Preoperating expanses	48	88	æ	46	36	16	0	0	0	0	0	0	_
Contingencies	Ś	œ	œ	43	4	<b>.</b>	٥	0	0	0	0	<b>C</b>	_
					:								
2. Operating Costs	.0	0	0	2654	2654	2968	2968	2968	2968	2968	2968	2968	2968
(1) Variable Costs	0	0	0	26	97	43	43	43	43	43	43	43	
Eccuric power charge	0	0	0	Ħ	13	14	14	14	77	14	4.	14	7
Telecom, line charge	0	0	0	13	13	53	83	52	53	29	53	83	23
(2)Fixed Costs	0	O	0	2628	2628	2925	2925	2925	2925	2925	2925	2925	292
Direct labor costs	o	<b>Q</b>	0	49	49	49	49	49	49	49	49	46	4
General overhead	0	c	C	33	31	3	31	<u></u>	31	31	33	₩.	=
Maintenance cost	0	0	0	2528	2528	2825	2825	2825	2825	2825	2825	2825	282
Office rental	0	6		20	28	20	8	82	8	50	8	8	72
ECONOMIC BENEFIT	0	0	Ģ	8094	92.76	10427	10850	11289	11745	12222	12717	13232	13769
(1)Decrease of Float	0	· C		7984	9155	10296	10709	11137	11582	12046	12527	13028	13549
(2)Abolition of Aviso	0	, C	· c	<b>X</b>	200	22	24	26	87	30	33	35	æ.
(3)Decrease of Manpower	0	0	0	92	101	109	117	126	135	146	157	169	182
NET BENEITI FLOW	-6704	-17293	-5012	2727	1857	6652	7882	8321	8777	9254	9749	10264	10801
	NPV AT CUT-0	UT-OFF R	ATE OF 12%		425R	<u>ra</u>	B/C RATIO	1.10	<u> </u>	EIRK =	14.52%		

Fable 14-7 INCOME STATEMENTS (1/2): CASE I

		240	TOWN CART	TOUR COO MULTANA TRUMATO ***		*** NATOVOOVY NI				PAGE	: : :
			NCOME INCOME	INCOME STATEMENTS - BASE CASE (1)	_	SSU)	(0001 \$				
YEAR		1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
OPERATING INCOME		6	o	0	3535.	3796.	4016.	4177	4344.	4517.	4698
TRANSFER REVENUE PROFIT FROM NBK		000	00	0.0	3327.	3534.	3684.	3832.	3985.	4144.	4310.
OPERATING COST		0	0	0	4987.	4987	5301.	5934.	5934.	5880.	5880
VARIABLE COST DIRECT FIXED COST DEPRECIATION AND AMORTIZATION		000	000	000	26. 2630. 2281.	2680. 2281.	2977. 2281.	2977. 2914.	43. 2977. 2914.	2977. 2860.	43. 2977. 2860.
OPERATING PROFIT		0.	o .	0	-1452.	-1192.	-1285.	-1757	-1590.	-1363.	-1182
NON-OPERATING EXPENSES		0	0	0	0	0.	0	0.	0	o	o
INTEREST ON LONG TERM DEBT		0.0	0.0	00	00	00	00	00	00	00	00
NET PROFIT OR (LOSS) BEFORE TAX		. 6	0	ò	-1452.	-1192.	-1285.	-1757.	-1590.	-1363.	-1182
I NCOME TAX		0	0.	0	0	0	0	0	0.		0
NET PROFIT OR (LOSS) AFTER TAX		0	0	0	-1452.	-1192	-1285.	-1757	-1590	-1363.	-1182
DIVIDENDS	1.	0	0	0	0	0	0	o	0	0	0
RETAINED EARNINGS		o	0	0	-1452.	-1192.	-1285.	-1757.	-1590.	-1363.	-1182.
		1 1 1 1 1 1 1 1		1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1	[		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			

Table 14-7 INCOME STATEMENTS (2/2): CASE!

	*** PAY	MENT SYSTE	*** PAYMENT SYSTEM PROJECT	IN KYRGYSTAN ***	STAN ***	
		BAS	BASE CASE (!)		\$SN>	(US\$ 1000)
YEAR	2002	2005	2007			
		Tr _a				
OPERATING INCOME	4886.	5082.	5285			
TRANSFER REVENUE PROFIT FROM NBK	4482.	4662.	4848.			
OPERATING COST	5880	5854	5854.			*:
VARIABLE COST DIRECT FIXED COST DEPRECIATION AND AMORTIZATION	2977. 2860.	2834.	2977 2834.	, y (		
OPERATING PROFIT	- 1994 - 1994	-773	-570			
NON-OPERATING EXPENSES	Ġ.	0	0			
INTEREST ON LONG TERM DEBT	0.0	00	00	1. 		
NET PROFIT OR (LOSS) BEFORE TAX	-994	-773.	-570.			
INCOME TAX	o	0.	0		: :	
NET PROFIT OR (LOSS) AFTER TAX	-994	-773.	-570.			
DIVIDENDS	0	o.	o			٠.
RETAINED EARNINGS	-994	-773.	-570.	·		

Table 14-8 FUNDS FLOW STATEMENTS (1/2): CASE!

											:
		*** PAY	MENT SYST	EM PROJE	*** PAYMENT SYSTEM PROJECT IN KYRGYSTAN ***	YSTAN ***				PAGE	 -
			AB -	BASE CASE	- (-)	(US\$	\$ 1000)				
YEAR		1995	1896	1981	1998	1899	2000	2001	2002	2003	2004
SOURCE OF FUNDS		5199.	13392.	3954.	2980.	4494	1638.	1157.	1324.	1497.	1678.
CASH GENERATED FROM OPERATION		0.0	0	0	829.	1090	966	1157	1324.	1497.	1678
PROFIT AFT TAX, BFR INT DEPRECIATION AND AMORTIZATION FINANCIAL RESOURCES		5199.	0. 0. 13392.	3954.	-1452, -2281, 2151,	2281. 3404.	2285. 2281. 642.	-1757. 2914.	-1590. 2914.	-1363. 2860.	-1182. 2860. 0.
SHARE CAPITAL LONG TERM DEBT SHORT TERM DEBT		5199. 0.0	13392.	3954.	2151.	9404 0 0	642.	000	000	000	000
Li.		5199,	13392.	3954	2151.	3404.	642.	ó	0		•
FIXED CAPITAL EXPENDITURE		5189	13392.	3954.	2151.	3404	642.	0	0	.0	0
NON-DEPRECIABLE ASSETS DEPRECIABLE FIXED ASSETS INTEREST DURING CONSTRUCTION	·	5199.	13392.	395.0	2151.	3404.	642.	000	000	000	000
CHANGE IN WORKING CAPITAL	,	o	0	0	0	0	ó	0	o	o	0
DEBT SERVICES	•	0	0	0	0.	0		0.	0		0.
REPAYMENT OF LONG TERM DEBT REPAYMENT OF SHORT TERM DEBT INTEREST ON LONG TERM DEBT INTEREST ON SHORT TERM DEBT		0000	0000	0000	0000	0000	0000	0000	0000	0000	0000
DIVIDENDS		0	0	o	0	0	0	0	ó	ó	0
	1	 	1	 	1 		1				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
CASH INCREASE OR (DECREASE)	٠,	ò	o O	0	829.	1090	. 986	1157.	1324.	1497.	1678.
BEGINNING CASH BALANCE ENDING CASH BALANCE	. :	00	00	00	829.	829. 1919.	1919.	2915.	4072.	5396.	5894. 8572.

# Table 14-8 FUNDS FLOW STATEMENTS (2/2): CASE!

			)			
	- BASE	SE CASE (1)	- 3		(US\$ 1000)	ô.
2005	2005	2007			: '	
				:		
1866.	2082.	2265.		*. *.		÷.
1866.	2062.	2265.				+ .
-994. 2860. 0.	-773. 2834.	-570. 2834.				
000	000	000	:			
Ġ	0	0		:		
o.	. 0	0.0				:,
000	000	000				
0	0	0				
0	0.	0.				
0000	0000	0000	marin en la companya de la companya			
0	0.	0.				
1866.	2062	2265.	÷.	2		
9572.	12500.	12500.		• •		
	2005 1 1866. 2860. 2860. 2860. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0. 0		2008 2007 2062 226 2062 226 2834 283 2834, 283 00.00.00.00.00.00.00.00.00.00.00.00.00.	2008 2007 2062 226 2062 226 2063 2834 2834 283 2834, 283 00.00.00.00.00.00.00.00.00.00.00.00.00.	2006. 2007 2062. 226 2062. 226 -77357 2834. 283 0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.	2006. 2007 2062. 226 2062. 226 -77357 2834. 283 0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.0.

Table 14-9 BALANCE SHEET (1/2): CASE I

	*** PAY!	*** PAYMENT SYSTEM BALANCE BASE	SK PROJECT SE SHEET SE CASE (1)	PROJECT IN KYRGYSTAN *** SHEET CASE (1) - (US	STAN ***	*** (000)			PAGE	
			907	<b>6</b>	1999	2000	2001	2002	2003	2004
YEAR	688	o n	n n			}			}	
ASSETS	5199.	18591.	22545.	23244.	25456.	24813.	23056.	21466.	20103.	18921.
CURRENT ASSETS	0.0	0	0	o .	0	0	0	O	0	O
OPERATING CASH ACCOUNT RECEIVABLE	000	000	000		000	000	000	000	000	000
ACC. EXCESS CASH	0	0		329.	1919.	2915.	4072.	5396,	6394.	8572
NET FIXED ASSETS	5199.	18591.	22545.	22415.	23537.	21898.	18984.	16070.	13210.	10349.
INVESTMENT	5199.	18591.	22545.	24696.	28100.	28742.	28742.	28742.	28742.	28742.
NON-DEPR. ASSETS DEPRECLABLE ASSETS AMORTIZATION	5199. 0.	0. 18591. 0.	22545.	0. 24696. 0.	0. 28100. 0.	28742.	0. 28742. 0.	0. 28742. 0.	28742. 0.	0. 28742. 0.
LESS: ACC. DEPRECIATION	0	0.	0	2281.	4563	6844.	9758.	12672.	15532.	18393.
LIABILITIES	•	ó	Ó	0	0	<b>o</b>	0	ö	0	0
CURRENT L'ABILITIES	0	0	0	0	0	0	0	Ö	6	0
ACCOUNT PAYABLE CURRENT PORTION OF L/T DEBT SHORT TERM DEBT	000	000	000	000	000	000	000	00.0	000	000
FIXED LIABILITIES	0	0	0	o	0	0	0	0	0	0
LONG TERM DEBT BALANCE OTHER FIXED LIABILITIES	00	00	00	0 0	00	00	00	00	00	60
STOCK HOLDERS EQUITY	5199.	18591.	22545.	23244.	25456.	24813.	23056.	21466.	20103.	18921
SHARE CAPITAL ACC. RETAINED EARNINGS	5189.	18591.	22545.	24696. -1452.	28100.	28742.	28742.	28742.	28742.	28742. -9821.
LIABILITIES & S/H EQUITY	S 199	18591.	22545	23244	25456	24813.	23056.	21466.	20103.	18921.

#### Table 14-9 BALANCE SHEET (2/2): CASE I

	•	*** PAY	*** PAYMENT SYSTEM BALANCE - BASE	SE CASE (1)	IN KYRGYSTAN ***	TAN ***	*** (US\$ 1000)	
YEAR		2002	2006	2007				
ASSETS		17927.	17154.	16585.	•		*:	
CURRENT ASSETS	· ·	0	0	0				
OPERATING CASH ACCOUNT RECEIVABLE INVENTORIES		000	000	000				
ACC. EXCESS CASH	•	10438.	12500.	14764.		. •		
NET FIXED ASSETS		7489.	4685.	1820				
INVESTMENT		28742.	28742.	28742.				
NON-DEPR. ASSETS DEPRECIABLE ASSETS AMORTIZATION		0. 28742. 0.	0. 28742. 0.	0. 28742. 0.				
LESS: ACC. DEPRECIATION	· · · · · · · · · · · · · · · · · · ·	21253.	24087.	26922.				
LIABILITIES		0	o l	0				
CURRENT LIABILITIES		0.	o	0			٠	
ACCOUNT PAYABLE CURRENT PORTION OF L/T DEBT SHORT TERN DEBT		000	000	000				
FIXED LIABILITIES		Ö	0	0.				
LONG TERM DEBT BALANCE OTHER FIXED LIABILITIES		60	00	00	. ,		٠	
STOCK HOLDERS EQUITY		17927.	17154.	16585.				
SHARE CAPITAL ACC. RETAINED EARNINGS		28742.	28742.	28742. -12157.		,	·	
LIABILITIES & S/H EQUITY		17927.	17154.	16585.				

### Table 14-10 RETURN ON INVESTMENT: CASE!

*** PAYMENT SYSTEM PROJECT IN KYRGYSTAN ***
RETURN ON INVESTMENT (IN "94 FIXED PRICE)
- BASE CASE (1) - (US\$ 1000)

0. 0. 05199 -5199 0. 0. 0. 05199 -5199 0. 0. 03392 -13392 -1352 -13392 -13392 -1352 -1324 -3954 -1351 2281 1090 02314 -2314 -1557 2914 1157 0. 157 1157 -1590 2914 1324 0. 1324 1324 -1363 2860 1497 0. 1497 1497 -1363 2860 1866 0. 1866 -773 2834 2062 0. 1866 1866 -570 2834 2265 0. 2062 2062 -570 2834 2265 012157 -12157	CAPITAL PROFIT EXPENDIR
0. 013392 0. 03392 2281. 829. 03354 2281. 1090. 02314 2281. 1996. 02314 2914. 1157. 0. 1157 2914. 1324. 0. 1357 2860. 1678. 0. 1497 2860. 1866. 0. 2062 2834. 2062. 0. 2062 2834. 2265. 0. 2062	5189.
2281. 829. 03954. 2281. 1090. 02314. 2281. 1996. 0. 354. 2914. 1157. 0. 1157. 2914. 1324. 0. 1157. 2860. 1477. 0. 1497. 2860. 1866. 0. 1866. 2834. 2262. 0. 4085. 26922. 14764. 012157.	13392.
2281	3954.
2281. 1090. 02314. 2281. 996. 0. 354. 2914. 1157. 0. 1157. 2860. 1673. 0. 1497. 2860. 1673. 0. 1678. 2860. 1866. 0. 2062. 2834. 2062. 0. 2062. 2834. 2765. 0. 215726922.	2151.
2281. 996. 0. 354. 2914. 1157. 0. 1157. 2860. 1497. 0. 1497. 2860. 1678. 0. 1678. 2860. 1866. 0. 1666. 2834. 2062. 0. 2062. 2834. 2265. 0. 4085.	
2914. 1157. 0. 1157. 28014. 1324. 2800. 1497. 0. 1497. 2800. 1678. 0. 1866. 2834. 2062. 2062. 2834. 2265. 0. 4085. 2632. 14764. 0. 12157.	
2914. 1324. 0. 1324. 2860. 1497. 0. 1497. 2860. 1678. 0. 1678. 2850. 1866. 0. 1866. 2834. 2062. 0. 2062. 2834. 2265. 0. 4085.	0
2860. 1497. 0. 1497. 2860. 1678. 0. 1678. 2860. 1866. 0. 2062. 2834. 2062. 0. 2062. 2834. 2265. 0. 4085.	0
2860. 1678. 0. 1678. 2860. 2860. 2862. 0. 2062. 2834. 2265. 0. 4085. 26922. 14764. 012157	0
2850. 1856. 0. 1856. 2834. 2052. 0. 2062. 2834. 2265. 0. 4085. 26922. 14764	0
2834. 2062. 0. 2062. 2834. 2265. 0. 4085. 26922. 14764	.0
2692. 14764. 012157	0
. 26922. 14764. 012157	-1820.
	26922.

INTERNAL RATE OF RETURN

ON (4) BFR-TAX NET IN-FLOW (2)-(1) -7.12 PER CENT

ON (5) AFT-TAX NET IN-FLOW (4)-(3) -7.12 PER CENT

Table 14-11 INCOME STATEMENTS (1/2): CASE II

	***	MENT SYST	*** PAYMENT SYSTEM PROJECT		IN KYRGYSTAN ***	:	. *.		PAGE	_
		NCOME BA	INCOME SIMIEMENIS - BASE CASE (II)	î 	SCU)	(0001 \$				
YEAR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
UNION CALLABORACO	C	o	: d	35 59 59	3796	4016.	4177.	4344.	4517.	4698
TRANSFER REVENUE PROFIT FROM NBK	00	00	000	3327.	3534.	3684.	3832.	3935.	4144.	4310.
OPERATING COST	0	0	0	5135.	5135.	5449.	6127.	6127.	5926.	5926.
VARIABLE COST DIRECT FIXED COST DEPRECIATION AND AMORTIZATION	000	000	000	2630. 2429.	26. 2680. 2429.	43. 2977. 2429.	2977. 3107.	43. 2977. 3107.	43. 2977. 2906.	43. 2977. 2906.
OPERATING PROFIT	0.	0	0	-1599.	-1339.	-1433.	-1950	-1783.	-1408.	-1228.
NON-OPERATING EXPENSES	0.	.0	0	489.	489.	489.	624.	624.	624.	624.
INTEREST ON LONG TERM DEBT	00	00	00	489.	489.	489. 0	624.	624. 0.	624.	624. 0.
NET PROFIT OR (LOSS) BEFORE TAX		0	. 0	-2088.	-1828.	-1922.	-2574.	-2407.	-2032.	-1852.
NCOME TAX	0	0	0	0.	0	0	0	0	0	0
NET PROFIT OR (LOSS) AFTER TAX	0	O	0	-2088.	-1828.	-1922.	-2574.	-2407.	-2032.	-1852.
DIVIDENDS	o.	o	0	o.	ö	ó	0.	0.	o	0
RETAINED EARNINGS	0.	0.	0	-2088.	-1828.	-1922.	-2574.	-2407.	-2032.	-1852.

## Table 14-11 INCOME STATEMENTS (2/2): CASE II

	*** PAY	MENT SYSTE	NT SYSTEM PROJECT	*** PAYMENT SYSTEM PROJECT IN KYRGYSTAN ***	AN ***	
		BAS	- BASE CASE (11)		\$SD)	(0001 \$50)
YEAR	2005	2005	2007			
		-				
OPERATING INCOME	4886.	5082	5285.			
TRANSFER REVENUE	4482.	4662.	4848.		·	
OPERATING COST	5926.	5854.	5854.			
VARIABLE COST DIRECT FIXED COST DEPRECIATION AND AMORTIZATION	2977. 2906.	43. 2977. 2834.	43. 2977. 2834.			
OPERATING PROFIT	-1039.	-773.	-570.			
NON-OPERATING EXPENSES	624.	599.	575.	1 1 1 1		
INTEREST ON LONG TERM DEBT	624.	50 0	575. 0.			
NET PROFIT OR (LOSS) BEFORE TAX	-1663.	-1372.	-1145.			
INCOME TAX	0	o	0			
NET PROFIT OR (LOSS) AFTER TAX	-1663.	-1372.	-1145.			
DIVIDENDS	0	0	0			
RETAINED EARNINGS	-1663.	-1372.	-1145			

Table 14-12 FUNDS FLOW STATEMENTS (1/2): CASE II

		٠.									
	*		ENT SYSTEM FUNDS FLOW - BASE	M PROJECT OW STATE	PAYMENT SYSTEM PROJECT IN KYRGYSTAN FUNDS FLOW STATEMENTS - BASE CASE (11) -		***			PAGE	
YEAR	51	1995	1996	997	1998	1939	2000	2001	2002	2003	2004
SOURCE OF FUNDS	<b></b>	5254.	13642.	4386.	3004.	4575.	1762.	1157.	1324.	1497.	1678.
CASH GENERATED FROM OPERATION		6	0	0	829.	1090	966	1157.	1324	1497.	1678.
PROFIT AFT. TAX. BFR INT. DEFRECIATION AND AMORTIZATION FINANCIAL RESOURCES	, un	0.	0.0.13642.	4386.	-1599. 2429. 2174.	-1339. 2429. 3485.	2429. 766.	-1950. 3107.	-1783. 3107. 0	-1408. 2906. 0.	-1228. 2906. 0.
SHARE CAPITAL LONG TERN DEBT SHORT TERN DEBT	<del>       </del>	1576. 3678. 0.	4093. 9549. 0.	1316 3070.	652. 1522. 0.	1045. Z439.	230. 536. 0.	000	000	000	000
USES OF FUNDS.		5254.	13642.	4386.	2663.	3974.	1255.	624.	624.	624.	624.
FIXED CAPITAL EXPENDITURE		5254.	13642.	4386	2174.	3485.	766.	o.	o .	0	Ö
NON-DEPRECIABLE ASSETS DEPRECIABLE FIXED ASSETS INTEREST DURING CONSTRUCTION		5189. 555.	13392.	3954. 432.	2151.	3404.	642. 124.	666	000	000	000
CHANGE IN WORKING CAPITAL		0	0	0	0.	o .	0.	0.	0	0	0
DEBT SERVICES	: : :	0		0.	489.	489.	489.	624.	624.	624.	624.
REPAYMENT OF LONG TERM DEBT	•		o	0 0	000	o	٥٥	00	00	00	o c
REPAYMENT OF SHORT TERM DEBT INTEREST ON LONG TERM DEBT INTEREST ON SHORT TERM DEBT		000	000	000	44 9 9 0		489.	624.	624.	624.	624.
DIVIDENDS	1	0	o i	0,	0.	0.	ö	o,	0	,	
CASH INCREASE OR (DECREASE)		0	0	Ö	341.	601.	507.	533.	700.	874.	1054.
BEGINNING CASH BALANCE ENDING CASH BALANCE		,   0 0	00.0	00	341.	941	941.	1449.	1982.	2682. 3555.	3555. 4610.

# Table 14-12 FUNDS FLOW STATEMENTS (2/2): CASE II

	*** PAY	MENT SYST FUNDS F	NT SYSTEM PROJECT IN I FUNDS FLOW STATEMENTS - BASE CASE (11) -	CYRGYSTAN	*** (US\$ 1000)
YEAR	2005	2006	2007		
SOURCE OF FUNDS	1866.	2062.	2265		
CASH GENERATED FROM OPERATION	1866.	2062.	2265.		
PROFIT ATT. TAX. BFR INT. DEPRECIATION AND AMORTIZATION FINANCIAL RESOURCES	-1039. 2906.	-773. 2834.	-570. 2834.		
SHARE CAPITAL LONG TERM DEBT SHORT TERM DEBT	000	000	000		
USES OF FUNDS	1439.	1414.	1390.		
FIXED CAPITAL EXPENDITURE	0	0	0		
NON-DEPRECIABLE ASSETS DEPRECIABLE FIXED ASSETS INTEREST DURING CONSTRUCTION	000	000	000		
CHANGE IN WORKING CAPITAL	0	0	0		
DEBT SERVICES	1439.	1414	1390.		
REPAYMENT OF LONG TERM DEBT REPAYMENT OF SHORT TERM DEBT INTEREST ON LONG TERM DEBT INTEREST ON SHORT TERM DEBT	815. 624. 0.	10 10 10 00 00 00	815. 0. 575.		
DIVIDENDS	Ó	o	o		
CASH INCREASE OR (DECREASE)	428.	647.	875.		
BEGINNING CASH BALANCE ENDING CASH BALANCE	4610.	5037.	5684		

Table 14-13 BALANCE SHEET (1/2): CASE II

						٠.		1.		3
	*** PAY	MENT SYSTE	EM PROJECT	T IN KYRG	IN KYRGYSTAN ***			. •	PAGE	
		BALANCE - BASE	CASE	- (11)	SCO2	\$ 1000)				
YEAR	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004
		i,	:							
ASSETS	5254	18896.	23282.	23368.	25025.	23869.	21295.	18888.	16856.	15005.
CURRENT ASSETS	o	o	0	o	o	o	o	0	o	ò
OPERATING CASH ACCOUNT RECEIVABLE	00	00	00	00	00	00	00	00	00	00
INVENTORIES	0	•	0	<b>6</b> .	0.	0	0	0	0	0
ACC. EXCESS CASH	0	0	-0	341	941.	1449.	1982.	2682.	3555.	4610.
NET FIXED ASSETS	5254	18896	23282.	23027.	24083.	22421.	19314.	16207	. 0	10395.
INVESTMENT	5254.	18896.	23282	25456.	28941	29707.	29707.	29707.	29707.	29707.
NON-DEPR. ASSETS DEPRECIABLE ASSETS! AMORTIZATION	5199. 559.	0. 18591. 305.	22545. 737.	0. 24696. 760.	0. 28100. 841.	0. 28742. 965.	0. 28742. 965.	0. 28742. 965.	0. 28742. 965.	28742. 965.
LESS: ACC. DEPRECIATION	0	Ö	0	2429.	4858.	7286.	10393.	13500.	16406.	19312.
LIABILITIES	3678	13227.	16297.	17819.	20259.	20795.	20795.	20795.	20795.	20795.
CURRENT LIABILITIES	0	6	o	Ö.	0	0	0	0,	o.	815.
ACCOUNT PAYABLE CURRENT PORTION OF L/T DEBT SHORT TERM DEBT	000	000	000	000	000	000	000	000	000	815. 0.
FIXED LIABILITIES	3678.	13227.	16297.	17819.	20259.	20795.	20795.	20795.	20795.	19980.
LONG TERM DEBT BALANCE OTHER FIXED LIABILITIES	3678.	13227.	16297.	17819.	20259.	20795.	20795.	20795.	20795.	19980,
STOCK HOLDERS EQUITY	1576.	5669.	6985.	5549.	4766.	3074.	500	-1907.	-3939.	-5790.
SHARE CAPITAL ACC. RETAINED EARNINGS	1576.	5669.	6985. 0	7637.	8682. -3916.	8912 -5838	8912. -8412.	8912. -10819.	8912. -12851.	\$912. -14702.
LIABILITIES & S/H EQUITY	5254	18896.	23282.	23368.	25025.	23869.	21295.	18888.	16856.	15005.

### Table 14-13 BALANCE SHEET (2/2): CASE II

	*** PAY	*** PAYMENT SYSTEM		N KYRGYSTAN ***
		- BASE	E CASE (11)	D. (20)
YEAR	2005	2006	2007	
ASSETS	12526.	10339.	8380.	
CURRENT ASSETS	o	0	0	
	000		000	
ACC. EXCESS CASH	5037.	5684.	6559.	
NET FIXED ASSETS	7489.	4655.	1620.	
INVESTMENT	29707.	29707.	29707.	
NON-DEPR. ASSETS DEPRECIABLE ASSETS I	28742. 965.	0. 28742. 965.	28742. 965.	
LESS: ACC. DEPRECIATION	22218.	25052.	27887.	
LIABILITIES	19980	19165.	18350.	
CURRENT LIABILITIES	815.	80 1 35	1040.	
ACCOUNT PAYABLE CURRENT PORTION OF L/T DEBT SHORT TERM DEBT	8 15.	815. 0.	1040.	
FIXED LIABILITIES	19165.	18350	17311.	
LONG TERM DEBT BALANCE OTHER FIXED LIABILITIES	19165.	18350. C.	17311.	
STOCK HOLDERS EQUITY	-7454.	-8526	-9970.	
SHARE CAPITAL ACC. RETAINED EARNINGS	8912. -16366.	8912. -17738.	8912.	
LIABILITIES & S/H EQUITY	12526.	10339.	8380	

### Table 14-14 LONG TERM DEBT: PHASE!

*** PAVMENT SYSTEM PROJECT IN KYRGYSTAN ***
LONG TERM DEBT (PHASE-1)
- BASE CASE (+1) - (US\$ 1000)

AMOUNT OF DEBT 16297.

INTEREST RATE 3.000 PER CENT/YEAR

REPAYMENT 20 YEAR-EQUAL-INSTALLMENT-REPAYMENT (ANNUAL REPAYMENT)

YEAR SER.NO PRINCIPAL INTEREST DEBT SERVICE BALANCE AFT. PAYMENT

1995 2 0 0 0 3678.

1996 2 0 0 0 13227.

1997 3 0 0 489. 489. 16297.

2000 6 0 489. 489. 16297.

2001 7 0 489. 489. 16297.

2003 9 0 489. 489. 16297.

2004 10 0 489. 489. 16297.

2005 6 0 489. 489. 16297.

2005 7 1986 1 16297.

2006 1 2 8 15. 489. 1304. 1279. 14668.

2007 13 815. 440. 1255. 13853.

	4077	.001
	100	-

									٠								
		EPAYMENT	PAYMENT														
		MENT CANNUAL RI	BALANCE AFT.	0	0	2 6 6 6	770	1000		- D + T	4497	4487	4497	4497	4497	4497.	4497
	T/YEAR	20 YEAR-EGUAL-INSTALLMENT-REPAYMENT (ANNUAL REPAYMENT)	DEBT SERVICE	0	0	<b>5</b> (	<b>5</b> (	<b>3</b> (	<b>3</b> (	62	135.	135.	135.	135.	135	135	944
. 0	3.000 PER CENT/YEAR	AR-EQUAL-INS	INTEREST	0		o .	<b>o</b>	0	0	135.	135.	135.	135.	135	135.	135.	944
.0044	3.0	20 YE	PRINCIPAL	0	0	٥	Ö	o,	o,	0	0	0	O	c	Ċ	o	c
AMOUNT OF DEB!	INTEREST RATE	REPAYMENT	SER, NO		8	m	4	S.	4	7	•0	G	2	· -	- 2	10	
AMOUN	INTER	REPAY	YEAR	4995	966	1997	1998	1999	2000	2001	2002	2003	700	) (	2000	2002	¥ HOL

### Table 14-16 RETURN ON INVESTMENT: CASE II

*** PAYMENT SYSTEM PROJECT IN KYRGYSTAN ***
RETURN ON INVESTMENT (IN '94 FIXED PRICE)
RETURN ON LASE CASE (11) -

x o																
(5) AFT-TAX NET IN-FLOW (4)-(3)	-5199	-13392.	-3954	-1322	-2314	354	1157		100	1497	1678	1866	2062	4085		-12157
(4) BFR-TAX (5) NET IN-FLOW 7 (2) - (1)	-89	-13392	-3954	-1322	-2314	40.00	187		324	1497	1678.	1866.	2062	4 C C	)   1 	-12157.
I NCOME C	c	0	o	c	· c	<i>.</i>	, c	· •	· ·	Ö	0	0	o		<b>5</b>	0
<b>3</b>																
S GROSS CASH IN-FLOW	c	; c	c	* 20°	000	000		0	1324.	1497	1678	1866	2062		2265.	14764.
DEPRECIATN C		. c		•			٠.								•	ĺ
OPERATING PROFIT	•	÷ (		9 6	n (1)	300 L	4	- 1950.	-1783.	-1408	1328	000	1 2	9	-570	-13122
(1) GROSS CAPITAL EXPENDTR		5199										2 (		5	-1820.	2692
CHANGE IN WORKING		0	0		0	0	0	0	G		<b>5</b> 6	<b>5</b> (	0	9	0	10
FIXED CAPITAL EXPEND.		5199.			`. . /						-					1
YEAR		1995	1996	1997	1998	1999	2000	2001		2002	2003	2004	2005	2006	2007	

INTERNAL RATE OF RETURN

ON (4) BFR-TAX NET IN-FLOW (2)-(1) -7.12 PER CENT

ON (5) AFT-TAX NET IN-FLOW (4)-(3) -7.12 PER CENT

Table 14-17 CONSOLIDATED PROJECT BUDGET DISBURSEMENT SCHEDULE (1/2)

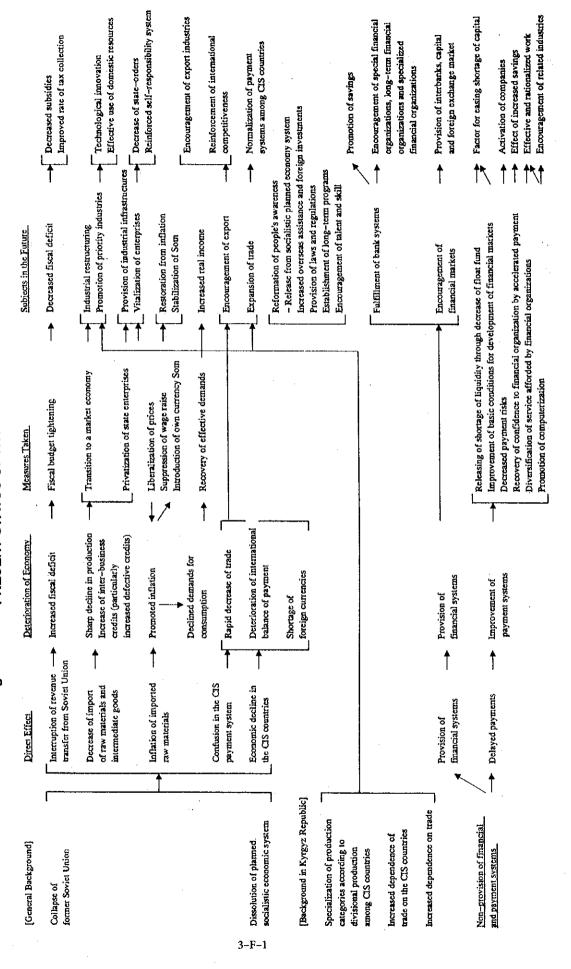
			~											900			) (mor	(UNIT: 1000 USS	~	TOTAL	
	L	1995	TOTAL	4	<u>8</u> 1	TOTAL	<u>u</u> ,	1	TOTAL	E	1,3%	TOTAL	٤		TOTAL	ů.	-1	COTAL	L	-1	TOTAL
I. MAN-MONTH ALLOCATION				,,,,,,,,,,						4,44						. '					
1. SYSTEM ENGINEERS		P. C. C. S. C.					a a complete de la co					٠,				. 6	c	ć		•	
(1) BASIC SOFTWARE	۵	0	0	0	0	0	Ö	0	0	0	0	0	0	<b>o</b> 1	0 (	<b>5</b> (	5 6	5 6	· :	•	;
(Z) SOITWARE DEVELOPMENT	113	0	113	ឱ	0	ដ	<b>5</b>	6	20	36	ō	9	8	•	3	<b>5</b> , (	<b>-</b> (	9	÷	2	5
(3) SYSTEM THANSITION	0	0	0	0	0	0	Ö	œ.	æ	0	2	24	0	ຊ	8	0	Š	5	<b>&gt;</b> •	3 3	3 8
(4) TEST	0	0	0	O	Ö	0	0	84	<b>4</b>	O	2	25	0	84	48	0	0	5		3	3
(SUII TOTAL)	113	0	113	122	0	13	8	8	177	36	<b>4</b>	₹.	8	83	128	0	গ্ৰ	8	: '	3	<u>د</u> :
INTINI	2	່ວ	16	24	ō	2	13	22	75	22	12	ጸ	12	16	2%	o	Q	9	1	Ş	132
3. NIK ENGINEEKS	21	0	21	36	0	36	36	0	36	36	٥	36	22	0	22	0	0	0	156	0	25
i	150	0	150	281	0	136	129	118	247	8	99	144	ŝ	æ	183	0	3	*		296	163
II. ABSENCE FEE									1									. =			
1. SYSTEM ENGINEERS																					
(1) SOFTWARE DEVELOPMENT	1356	0	1356	2652	0	2652	225	0	972	55	0	432	52	0	720	0	0	0		٥	6132
	0	0	Ö	٥	0	o	576	o	576	288	0	288	240	0	240	336	0	33%	1440	0	77
(3) TEST	0	0	6	0	0	0	576	0	576	288	0	288	576	0	576	0	6	0		0	1440
(SUB TOTAL)	1356	0	1356	2652	Ö	2652	2124	0	2124	1008	0	1008	1536	0	1536	336	٥	336	9012	٥	9012
2 INTERPLETER	256	0	256	384	0	35	3	O	3	384	0	384	4	0	448	96	0	8	2112	0	2112
3. NBK ENGINEEKS	0	0	0	O	0	O	٥	0	0	0	0	Ö	0	0	0	0	0	0	0	0	•
TOTAL	1612	0	1612	3036	0	3036	2668	0	2668	1392	0	1392	1984	0	1984	432	D	432	11124	٥	11124
III. TRAVEL EXPENSES			-				:		-	- Nav 1961								* *			
1. SYSTEM ENGINEERS						,	w -					•				i vi					
(1) SOFTWARE DEVELOPMENT	74	0	23	12	0	12	12	0	12	12	0	12	22	0	12	12	0	ဌ	¥	0	<b>ઍ</b> .∶
(2) SYSTEM TRANSITION	0	0	5	ō	0	0	32	0	32	16	0	91	13	0	13	61	0	10	<b>&amp;</b>	0	€ :
(3) TIST	G	Ö	0	0	Ö	0	32	Ö	32	91	•	9	8	0	32	٥	0	0	88	•	<b>3</b>
(SUB TOTAL)	ઢ	0	75	12	0	12	9/	٥	76	4	0	4	57	0	57	33	0	3	5.4	0	7.
2 INTERPLETER	0	0	0	0	o	0	15	0	15	82	0	30	11	0	11	4	0	4	37	0	33
3. NIJK ENGINEEKS	7	0	7	24	0	22	24	0	73	8	0	ઢ	18	0	18	0	0	٥	ᄚ	0	춁
TOLYT	æ	0	8	36	0	36	115	0	115	76	0	76	98	٥	98	35	0	35	385	٥	X
IV. LODGING/PERDIEM ALLWICE							******														. •
1. SYSTIEM ENGINEERS									· · ·	·			,								
(1) SOFTWARE DEVELOPMENT	ભ		9	_	CI	6	-	6	٣	-	N	m	-	8	9	H	61	m	,	7	72
(2) SYSTEM TRANSITION	٥	0	0	O	0	O	55	82	13.	83	36	67	ន	33	9.6	33	46	78	HC.	197	33
(3) TEST	0	0	0	0	0	0	55	79	<u>;</u>	87	39	29	55	5	134	0	0	0	138	197	335
(SUB TOTAL)	ĊI	٣	9	7	C)	E.	112	360	271	56	81	137	5	114	193	33	48	8	83	<del>2</del> 0	65
2 INTERPLETER	9	0	C	0	O	0	25	36	19	1.	8	8	18	26	45	7	01	17	3	8	157
3. NDK ENGINEEKS	\$	6	95	162	0	162	162	0	162	162	0	162	122	0	122	٥	0	0	<b>2</b>	0	<b>3</b>
TOTAL	76	m	ž	163	7	365	299	196	495	232	901	332	219	140	359	40	28	86	1049	S	15.50

Table 14-17 CONSOLIDATED PROJECT BUDGET DISBURSEMENT SCHEDULE (2/2)

		1995	•		1996	-		1997			1998			1999	-	* 12 14 14 14 14 14 14 14 14 14 14 14 14 14	8	the Property of the Party of th	Aut., more desirable desse est a	<b>1</b>	of the factor of party of the
	<b>L</b>	i	TOTAL	<u>.</u>	1	TOTAL	Ŀ		TOTAL	Ŀ	י	TOTAL	í.	L	CTAL.	<b>64</b>	1	TOTAL	<u>-</u>		TOTAL
											<del>, , , , ,</del>										
					<del></del>	•			:			-									
(1) SOFTWARE DEVELOPMENT	477	0	478	930	0	930	342	0	342	153	0	153	253	0	253		0		2155	-	2157
	0	۵	0	0	O	0	8	20	7,	33	4	37	87	Ю	31	39	'n	43	991	8	385
-	٥	٥	0	٥	O	0	9	<b>ao</b>	74	33	4	33	32	<b>a</b> ¢	4	0	0	0	991	ន	<b>38</b>
	477	0	478	930	O	930	474	16	490	219	82	722	347	11	359	40	5	45	2487	4	2528
<u> </u>	26	0	56	38	0	38	58	4	62	41	2	43	48	3	8	11	-	12	127	٥	ង
: !	7	G ,	=	19	0	61	61	0	51	19	0	19	14	O	14	٥	0	D	æ	0	æ
:	514	O	514	282	0	<del>28</del>	551	ន	571	278	10	288	409	17	43	51	9	\$6		S	2839
VI FACILITY INVESTMENT			·							***************************************				- <del></del>	-	*********					٠
	873	0	873	1771	0	1771	٥	0	0	0	0	0	129	0	129	0	0	٥	2773	0	2773
	1272	0	1272	6216	٥	6216	Ö	0	0	0	0	0	295	0	295	0	0	0	7783	0	180
(3) AUXLIARY EQUIPMENT	398	7	904	0	Ö	0	0	0	0	0	0	0	0	0	0	0	0	0	398	7	<del>\$</del>
(4) THANSPRIN & HANDLING	36	(1)	38	134	'n	139	0	0	0	19	-	a	19	,	8	•	0	0	36	œ	197
	7	22	33	7	22	114	0	0	0	0	0	0	9	9	16	0	Ō	0	88	103	191
	259	.61	261	816	20	824	٥	0	0	2	٥	2	45	H	46	0	0	0	1120	11	1131
	2849	56	2875	8978	88	9064	0	0	0	21	1	22	194	12	506	0	0	٥	12321	124	12445
VII OTHER INVESTMENT COSTS	<u>.</u>									2. si s		<del></del>	•								
(1) PREOPERATIONAL EXPCS	Ħ	4	55	8	ĸ	\$	8	73	95	12	5	27	٥	8	42	4	14	18	26	286	362
	-	4.	9	C1	œ	20	7	90	10	<b>6-4</b> 1	٧.	9	1	9	4	0	-1	7	æ	29	36
	12	8	61	Ħ	83	105	22	8	105	13	S	63	10	36	46	4	15	8	¥	315	38
<u> </u>	5122	78	5200	13222	170	13392	3655	298	3952	2012	161	2173	3202	202	3404	295	79	641	27752	066	28742
										1											



Figure 3-1 PRESENT STATUS OF KYRGYZ ECONOMY AND SUBJECTS



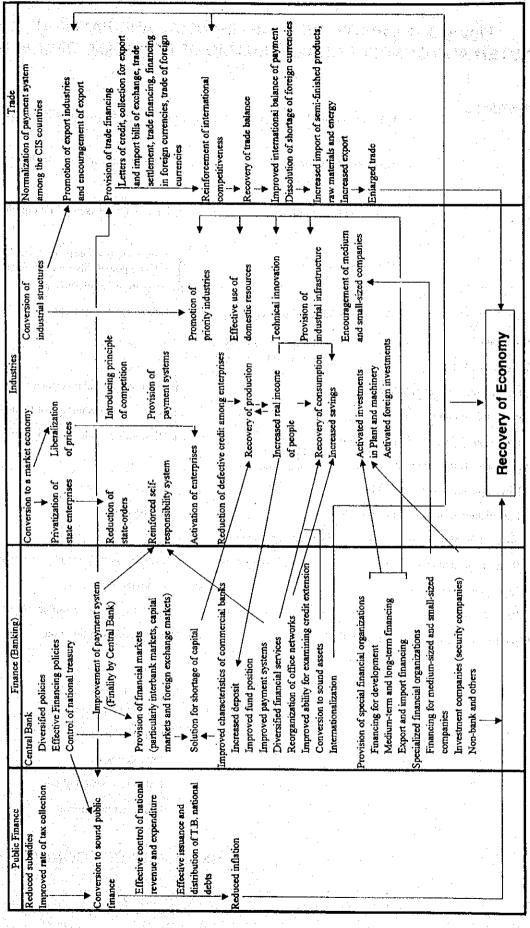
### Figure 3-2 REQUEST BY THE KYRGYZ FEDERATION OF MANUFACTURING ENTERPRISES

(Note) The following is a summary of the requests made by the Kyrgyz Federation of manufacturing Enterprises in a written appeal submitted to the President, the Government and the National Assembly at the end of July, 1994.

The managements of Kyrgyz enterprises request the following to the President, the Government and the National Assembly:

- 1) That the Ministry of Finance, together with the National Bank, guarantee a 2-3 year period of grace for loans previously provided as well as reconsidering their interest rates.
- 2) That an exemption be given regarding penalties on unpaid taxes for 1993-1994.
- 3) That the problem of mutual payments between enterprises of the Kyrgyz Republic and of CIS countries be solved on the intergovernmental level.
- 4) That favorable financing conditions be granted for procurement of working funds.
- 5) That reconsideration be given on the tax system as early as possible (with a view to alleviating the heavy tax burden) so that the total amount of taxes, regardless of direct or indirect taxes, will not exceed 50% of total profits.
- 6) That all kinds of taxes included in the cost of commodities be abolished.
- 7) That the housing and public sectors entered in the balance-sheet of enterprises be placed under the control of local governments as their property.
- 8) That payments into the budget (Note; Probably meaning tax payments.) be made once every quarter.
- 9) That a responsible organization be established for commercial banks to make payment within the Republic immediately.
- 10) That commercial banks be ensured free foreign exchange operations.
- 11) That comprehensive measures be considered to make it possible to maintain a comparatively low exchange rate with respect to the U.S. dollar and that the same be done with respect to the currencies of Kyrgyz basic foreign trade partners, the CIS countries.
- 12) That a working group consisting of representatives of the Federation of Enterprises, representatives of enterprise and representatives of various government ministries and agencies be set up for consideration at regular intervals of the problem of setting businesses back on their feet so as to be able to solve that problem.

Figure 3-3 IMPORTANCE OF PROVISION AND IMPROVEMENT OF FINANCIAL AND PAYMENT SYSTEMS



### Figure 3-4 IMPROVEMENT OF FINANCIAL AND PAYMENT SYSTEM AND CONCEPTIONAL SCENARIO OF ECONOMIC RECOVERY

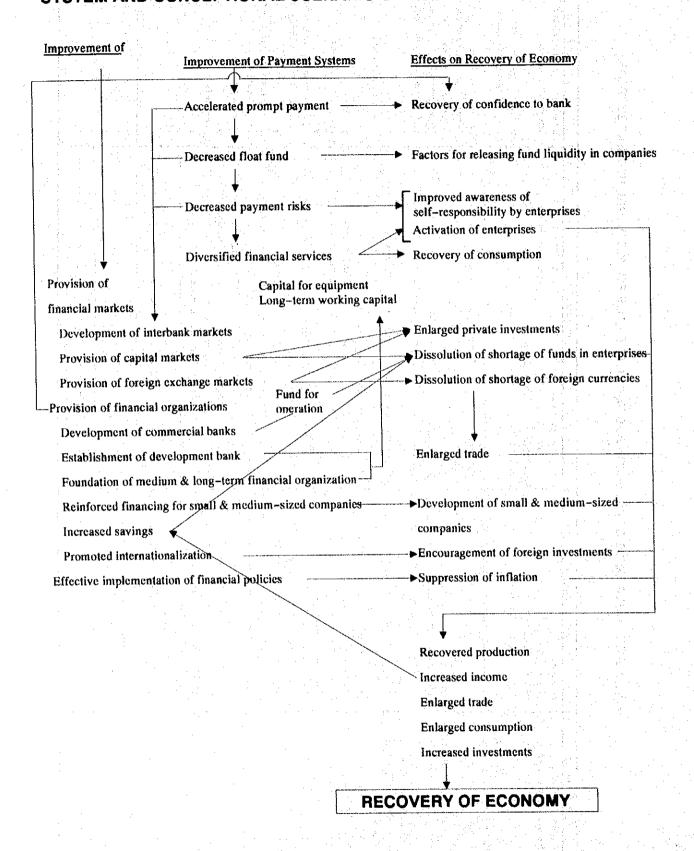
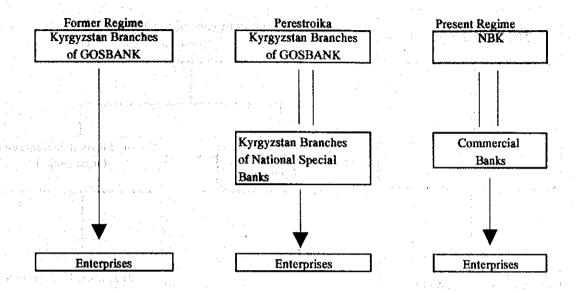


Figure 3-5 LIST OF FOREIGN AID CREDITS EXTENDED OR TO BE EXTENDED TO KYRGYZ REPUBLIC

	Purpose of Aid Credit	Currency	Amount (Mil.)	Equivalent to in US\$	Rate	Repayr Total	nent Terms Grace Period	Amount Disburs
Foreign AM C-	edit Extended			(Mil.)	(%)			(Mil.\$)
iMF		1106	60.0	62.0	5.71	10	2	60 N
	1) Stand-by 2) SIF	US\$	62.0	62.0	5.7	10	3	60,0
IBRD (IDA)	Forex Component     Purchase of Goods	US\$	60.0	60.0	0.75	40	. 10	35.6
	3) Technical Assistance							
Japanese Government	BOP Assistance     Purchase of Goods & Services	US\$	60.0	60.0	3.0	30	10	7.3
(OECF)	3) Technical Assistance							
Turkish	1) Commodity Loan	US\$	75.0	75.0	LIBOR+1.3	4	1.5	19.3
Government	2) Investment Loan				8	6	3	4.8
EC Committee	Purchase of 1) Medical Equipment 2) Infant Food	ECU	23.7	25.7	LIBOR+1.3	.3	3	24.4
	z) mant 100a	*			4.7			
Swiss Government	Subrogation of Debt to IFC and MIGA	US\$	1.1	1.1	<del>-</del>	6	3	1.1
Pakistan	Purchase of Pharmaceutical	US\$	10.0	10.0	5.0	4	1	4.0
Government	Equipment	•						
Russian	1) Technical Credit	Ruble	15,000.0	12.5	LIBOR+1	- 3	2	12,5
Federation		Ruble	12,027.0	7.2	LIBOR+2	3	2	7.2
	2) Inter-state Settlement	Ruble	55,800.0	111.7	LIBOR+3	8	2	111.7
Kazakhstan Government	Technical Credit     Inter-state Settlement	Ruble	17,814.5	31.5	LIBOR+3.7	6	2	31.5
Uzbekistan Government	Technical Credit     Inter-state Settlement	Ruble	9,487.0	13.3	LIBOR+3.7	6	2	13.3
Sub-total				470.0				
Enmine Aid Co	redit to be Extended							
BRD	Financial Assistance for	US\$	120.0	120.0	- No	t decided	vel -	_
	Reforms of Agriculture and	COU	220.0	120.0			, , , , ,	
	Tele-communication and for Privatization Program							
IMF	ESAF	SDR	9.4	13.8	- No	t decided	yet -	· _
EBRD	1) Assistance of Agriculture,	ECU	10.0	11.6		15	5	-
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Textile Industry and Small/ Medium Scale Industry			Max 13				
	<ol> <li>Assistance for Development of Tele-communication and</li> </ol>	US\$	45.0	45.0	- No	t decided	yet -	-
	for bringing up of Individual Firm and Grain Industry							
KFW	1) Assistance of Agriculture,	DM	15.0	9.8	2.0	30	10	_
	Textile Industry and Small/					-		
	Medium Scale Industry  2) Assistance for brining up	DM	20.0	13.1	0.75	40	10	<b>-</b> .
	Small/Medium Scale Industry							
	Project Assistance for	US\$	17.0	17.0	- No	t decided	yet -	. · · -
ment Fund (Co-financing	Improvement of Highway		•	,				
with EBRD)								
Japanese Government	Project Assistance	US\$	60.0	60.0	- No	t decided	yet -	
Sub-total			· · · · · · · · · · · · · · · · · · ·	291.7				

Figure 4-1 HISTORY OF BANKING SYSTEM IN THE KYRGYZ REPUBLIC



The Supreme Soviet

Government of the Kyrgyz
Republic

NBK

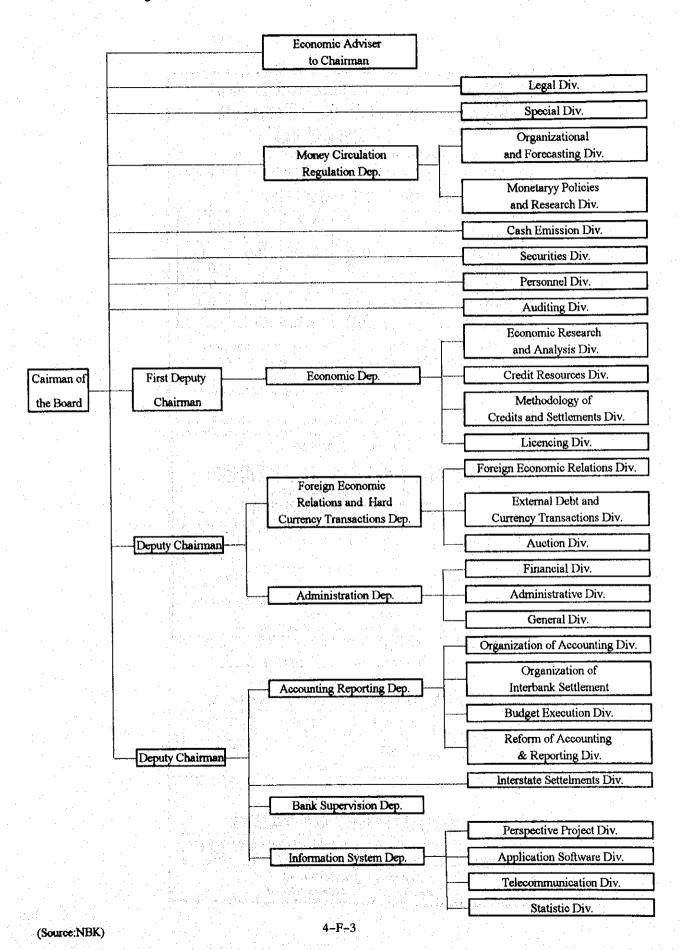
Ministry of
Finance

National Insurance Supervision
Organization

Insurance Companies

Figure 4-2 THE PRESENT FINANCIAL STRUCTURE

Figure 4-3 ORGANIZATION CHART OF NBK(AS OF MARCH,1994)





### Вам срочно нужны деньги? Обращайтесь в "Асмбард селянс Анк"!

- * Мы выдадим любую нужную вам сумму.
- * У нас самые минимальные процентные ставки.

### **НЕ ВЕРИТЕ? СМОТРИТЕ:**

дни сомы	5-10	11-15	16-20	21-25	26-30
0-200	1	0,9	0,8	0,9	1
201-400	0,9	0,8	1	0,8	0,9
401-600	0,8	1	0,9	1	0,8
601-800	0,9	0,8	1	0,8	0,9
801-1000	1	0,9	0,8	0,9	1

Обратите виниание: для студентов, пенсионеров, инвалидов войны и труда, интерей-героинь и т.п. — ЛЬГОТЫ — 0,7%.

Наш адрес: ул. Киевская, 107, остановка "Дом быта". Төлөфон: 21-07-57.

### Фирма "Магнат"

### **EPNINMAET BRAAAM OT RACEAERNS**

Выплата дивидендов

по окончании ороже договора					
	1 месяц	3 месяца	6 месяцев		
COMM	15%	65%	140%		
рубли 15%		70%	150%		
доллары	8%	40%	70%		

Фирма обеспечит обязательное страхование вашего вклада.

Телефоны: 43-50-10, 22-03-27, 26-46-30.

### Трастовая компания J.S.A.

### БЕРЕТ займы у населения.

	3 месяца	6 месяцев	12 месяцев
Сомы	100%	170%	250%
\$	40%	75%	150%.

Телефон: 42-19-64.

### Фирма "АТИ"

### ПРИНИМАЕТ ВКЛАДЫ

	1 месяц	3 месяца	6 месяцев	12 месяцев
COMM	20%	90%	190%	420%

Адрес: ул. Советская, 94. Телефоны: 44-54-84, 47-89-41.

FIGURE 4-5 LOCATION OF BRANCHES OF COMMERCIAL BANKS IN THE KYRGYZ REPUBLIC (AS OF JAN. 1994)

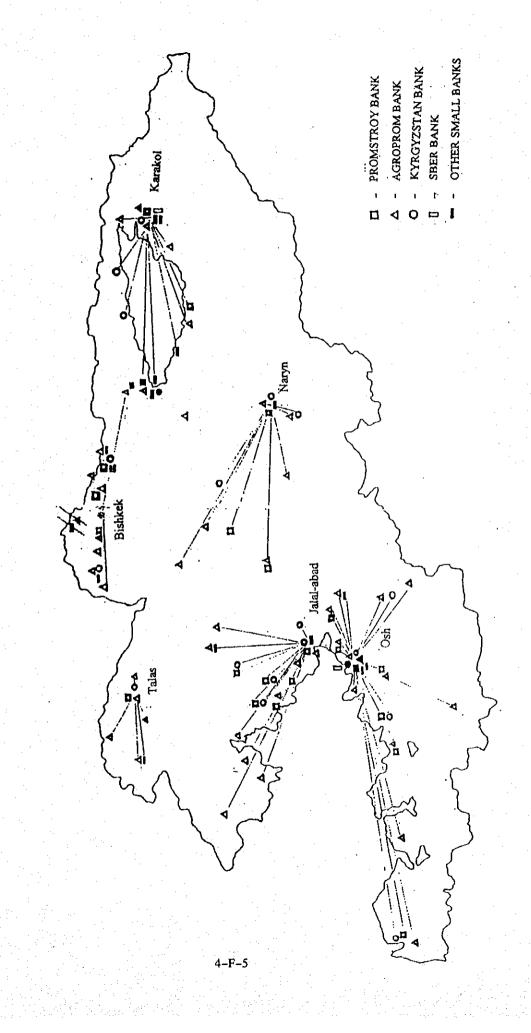
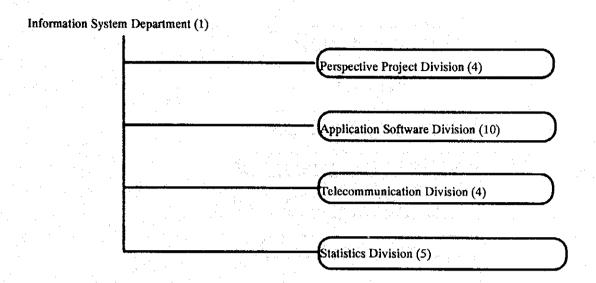


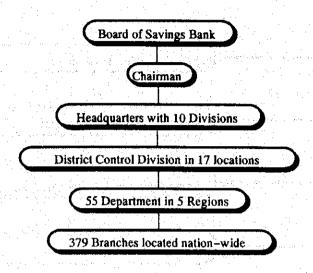
Figure 5-1 ORGANIZATION STRUCTURE OF THE INFORMATION DEPARTMENT



Note: Numbers of regular staff members are shown in the parentheses.

(Source: NBK)

Figure 5-2 ORGANIZATIONAL STRUCTURE OF THE SAVINGS BANK



### 10 Divisions in the Headquarters

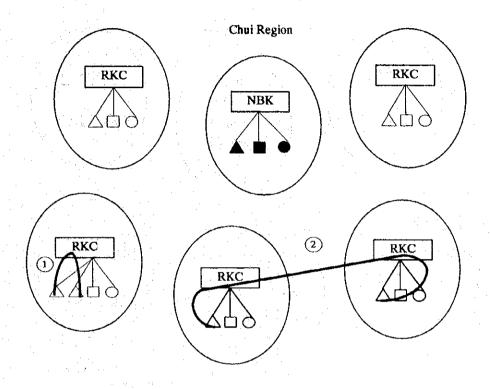
- 1. Financial, Economic Division --- Analysis of economic environment
- 2. Accounting, Reporting Division --- Accounting processing, control of financial payment
- Securities Division --- Product development for corporations, public relations, development of cashless payment
- 4. Automation Division --- Planning, development, hardware installation and development of cashless payment
- 5. Auditing Division --- Maintenance of securities of cash assets
- 6. Credit Division --- Research of credit market, control of credit and loan
- 7. Securities Division --- Control of instrument securities
- 8. Personnel Division --- Recruitment, positioning of personnel, and human resources development
- 9. Operation Division --- Implementation of inter-bank payment, accept deposit
- 10. Foreign Exchange Division --- Implementation of foreign exchange and crossboarder

(international) payment, research and analysis

Source: Savings Bank

Note: According to NBK, the number of branches is 58, as shown in Table4-1.

Figure 5–3° FLOW OF PAYMENT DOCUMENTS IN OLD RKC DAYS

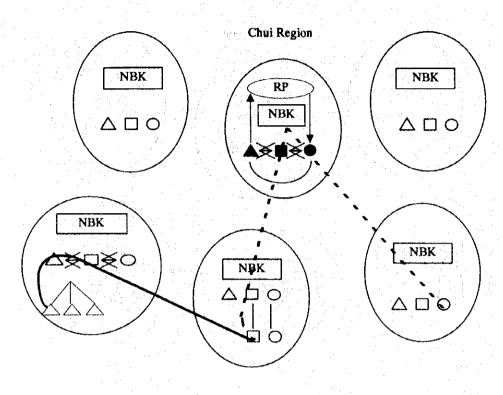


▲ ■ • : Head Offices

△□○: Branch Offices

Source: NBK

Figure 5-4 FLOW OF PAYMENT DOCUMENTS AFTER MAY 1993

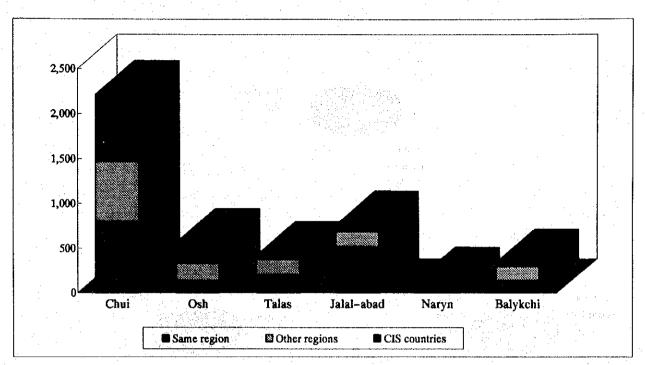


▲ ■ ● : Head Offices
△ □ ○ : Branch Offices

NBK : NBK Branches RP : Rashotonaya Parata

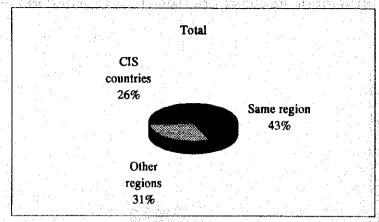
Source: NBK

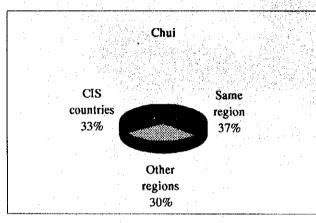
Figure 5-5 NUMBER OF PAYMENT DOCUMENTS IN OLD RKC IN 1992

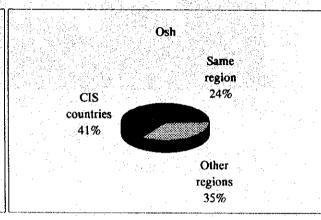


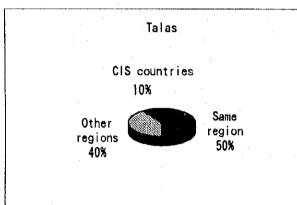
Source: NBK Jan., 1994

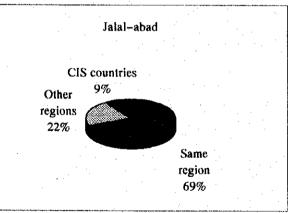
Figure 5-6 PAYMENT DOCUMENTS OF EACH REGION(1/2)

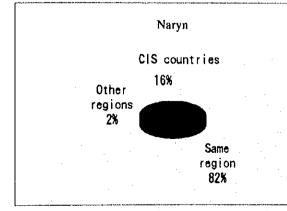












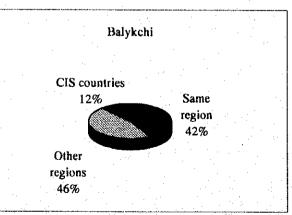
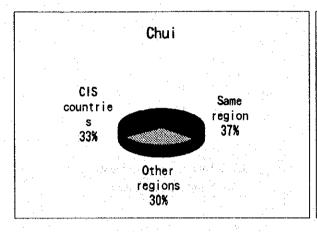
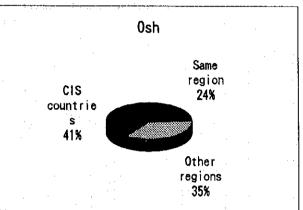


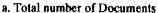
Figure 5-6 PAYMENT DOCUMENTS OF EACH REGION(2/2)

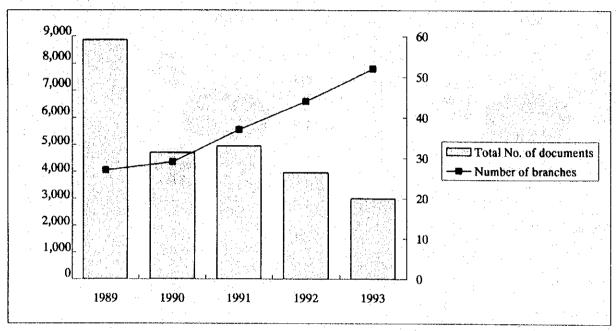




Source: NBK Jan., 1994

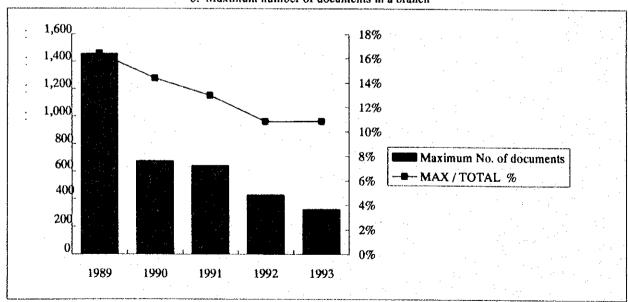
Figure 5-7 NUMBER OF DOCUMENTS PROCESSED IN CHUI COMPUTER CENTER OF NBK(1/2)





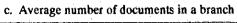
Source: NBK Chui Computer Center, Jan., 1994

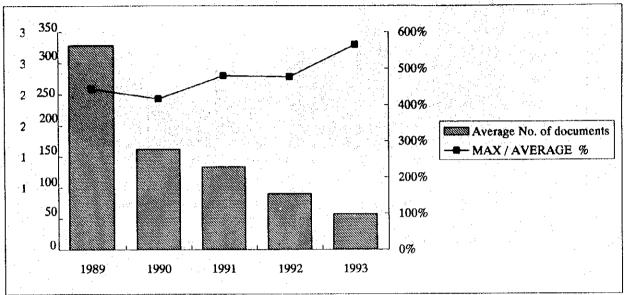
### b. Maximum number of documents in a branch



Source: NBK Chui Computer Center, Jan., 1994

Figure 5-7 NUMBER OF DOCUMENTS PROCESSED IN CHUI COMPUTER CENTER OF NBK(2/2)





Source: NBK Chui Computer Center, Jan., 1994

8,000 7,000 6,000 5,000 4,000 3,000 2,000 1,000 Issyk-kul Naryn Chui Osh Jalal-abad Talas Chui Osh ■ Issyk-kul ☐ Jalal-abad ■ Talas ■ Naryn

Figure 5-8 NUMBER OF PAYMENT TRANSACTIONS OF 9 BANKS

Source: NBK Computer Center, Jan., 1994

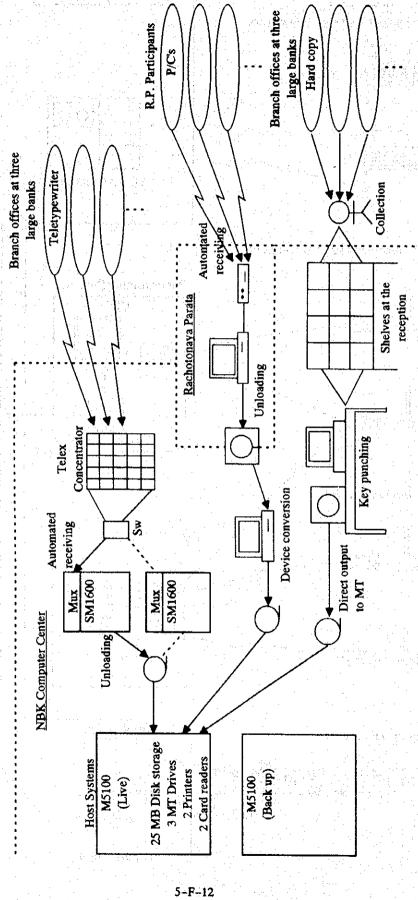
**Commercial Banks NBK Computer Center** 1. Input & Output by tele-typewriters 00 (Data collection) (HOST Systems) 2. Input & Output by P/Cs through RP Maintain Rashotonaya Parata **Balance of** (RP) Correspendent Accounts, as well as other accounts (switching) 3. Data switching at NBK NBK (switching) **Print-outs** 4. By paper decuments (Delivery) (Key-to-tape)

5-F-11

Source: NBK

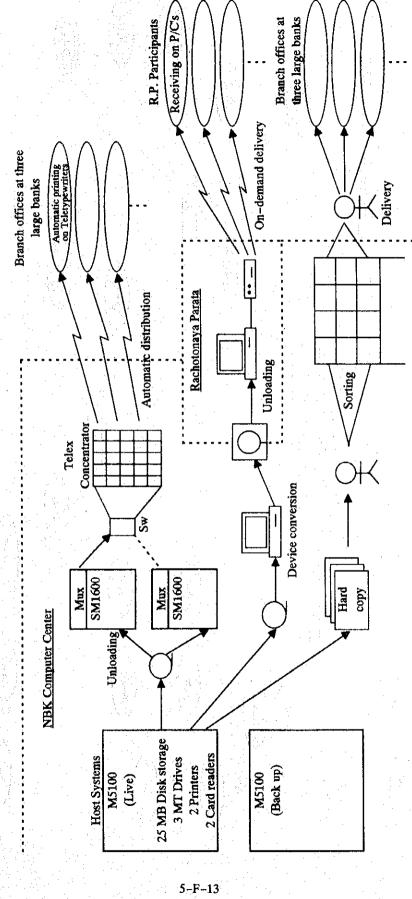
Figure 5-9 EXISTING COMPUTER NETWORKS FOR THE PAYMENT SYSTEMS

Figure 5-10 COLLECTING PAYMENT DATA AT NBK COMPUTER CENTER IN BISHKEK



Source:Computer Center

Figure 5-11 DELIVERY OF PAYMENT DATA AT NBK COMPUTER CENTER IN BISHKEK



Source: Computer Center

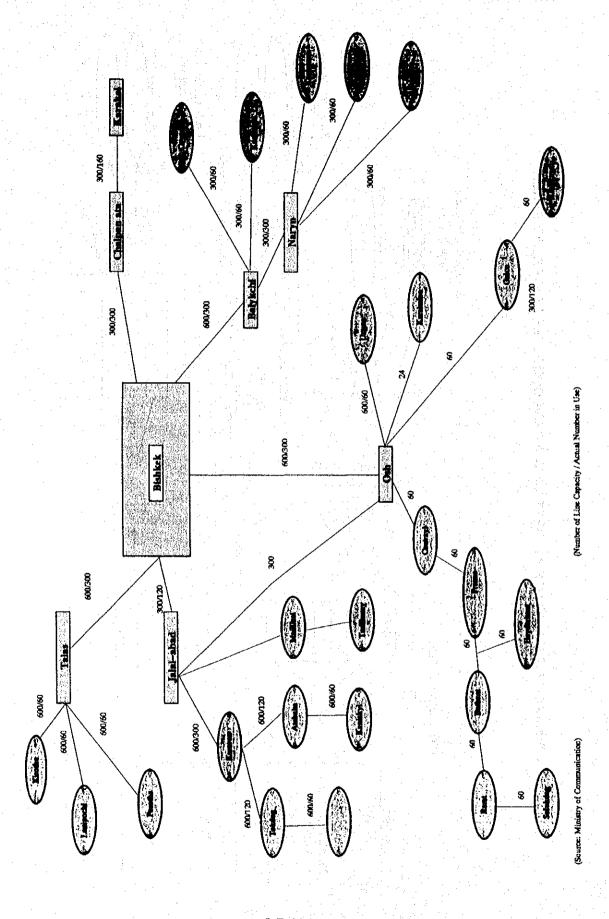
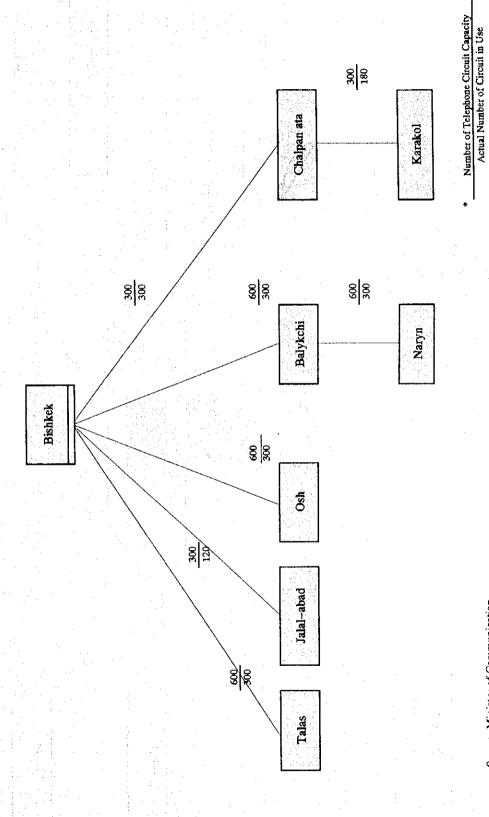


Figure 5-13 INTER-CITY NETWORK SYSTEMS DIAGRAM IN THE KYRGYZ REPUBLIC



Source: Ministry of Communication

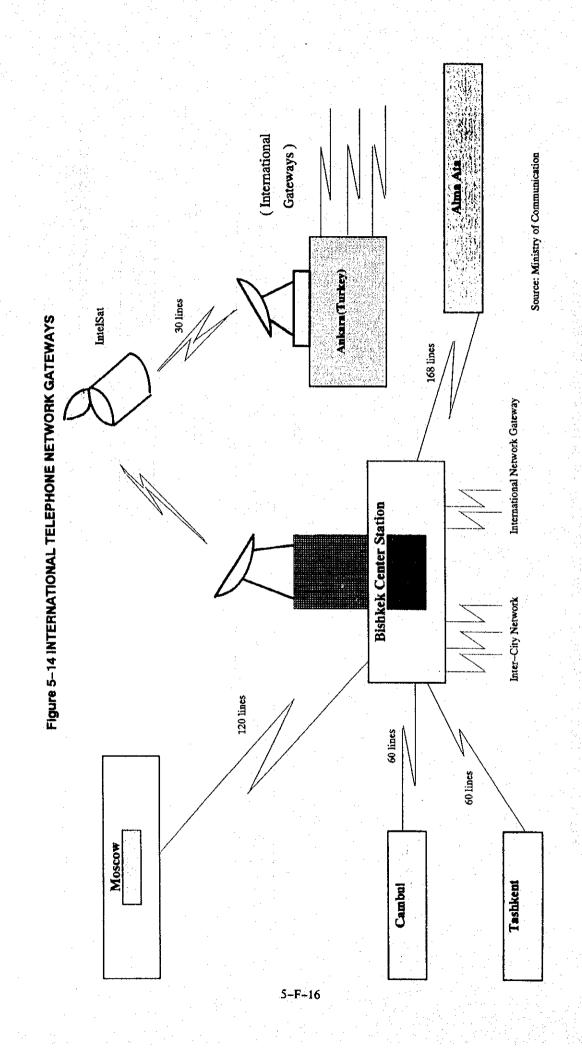
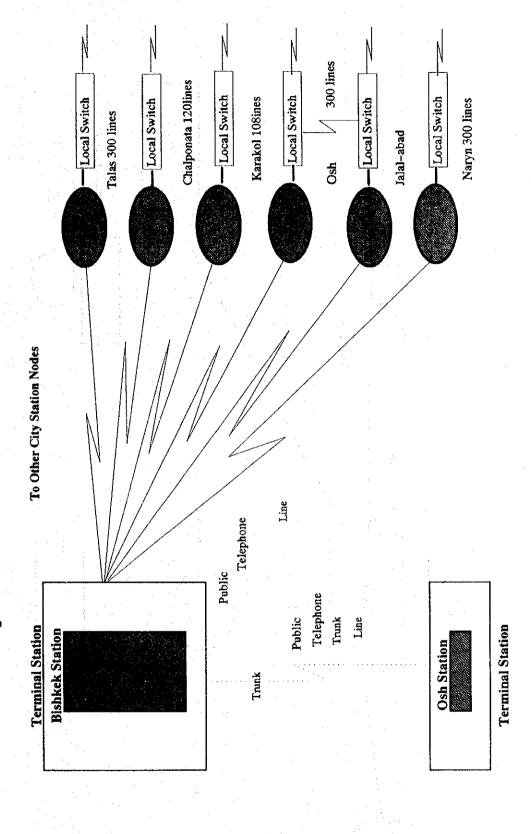


Figure 5-15 NETWORK CONFIGURATIONS OF ISKLA-I



Source:Ministry of Communication

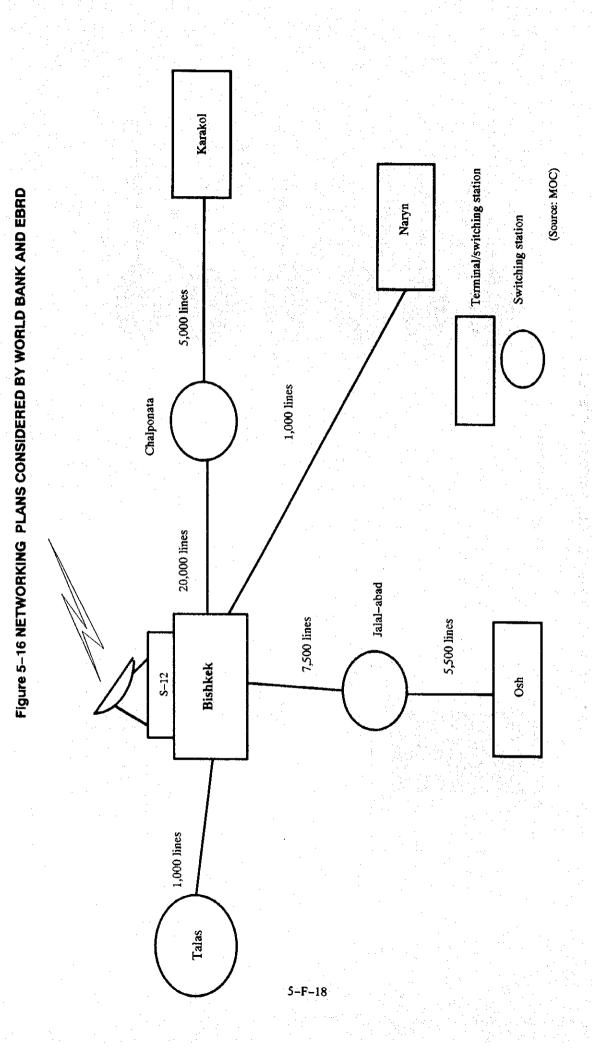
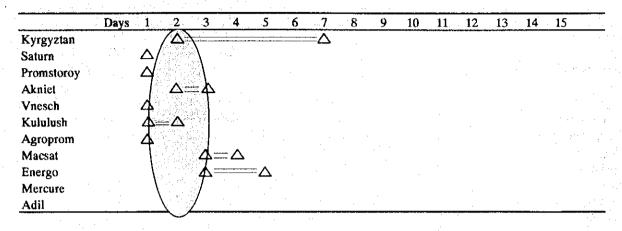
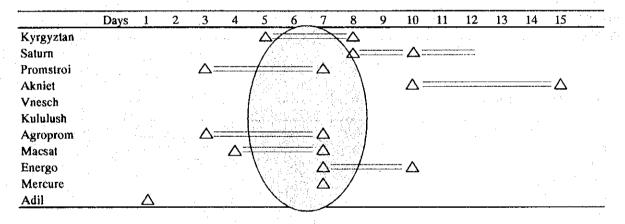


FIGURE 5-17 PAYMENT FULFILLMENT TERM ANALYSIS ANSWERS FROM COMMERCIAL BANKS

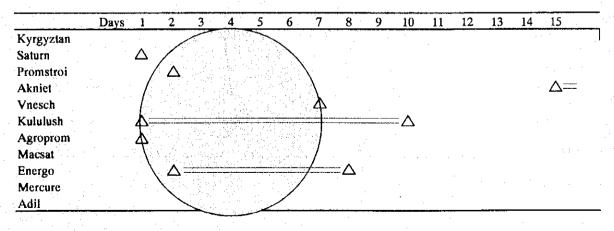
### A. Send to Same Region



### B. Send to Other Regions



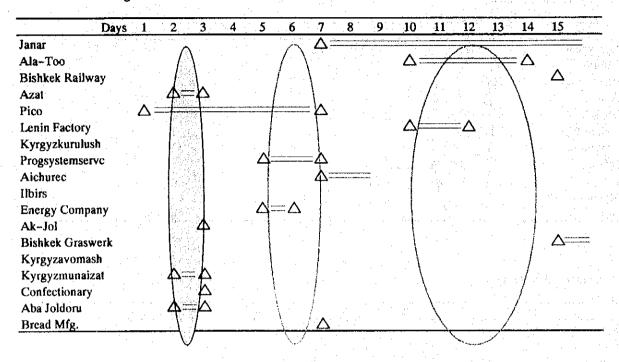
### C. Send to CIS Countries



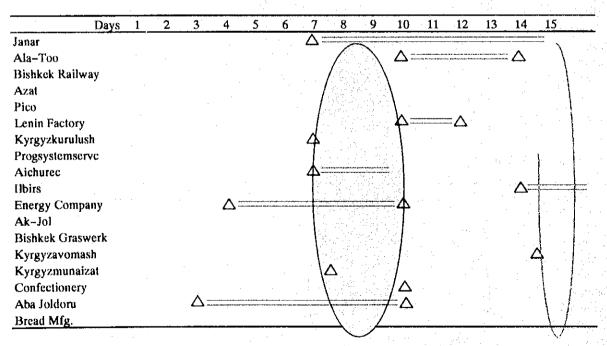
Source: JICA Study Team Jan. 1994

Figure 5-18 PAYMENT FULFILLMENT TERM ANALYSIS ANSWERS FROM CORPORATION

## A. Send to Same Region



### B. Send to Other Regions



Source: JICA Study Team Jan. 1994

Figure 5-19 PAYMENT FULFILLMENT

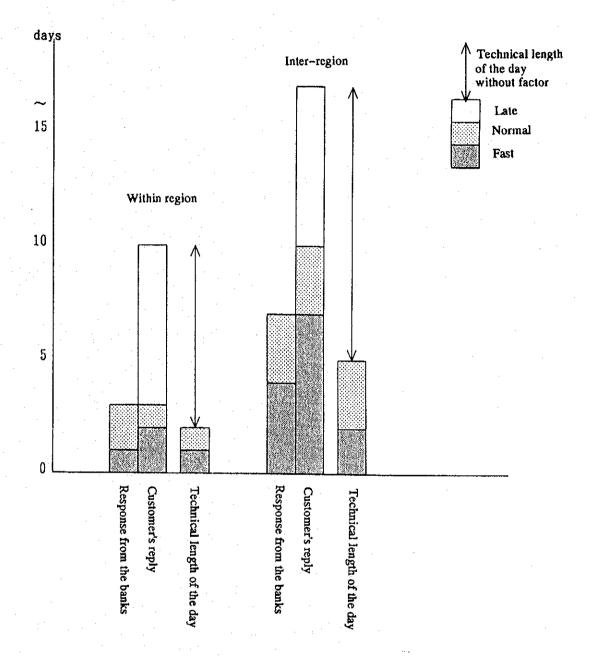


Figure 7-1 COMPARISON OF INCOME VELOCITY OF BROAD MONEY (1)

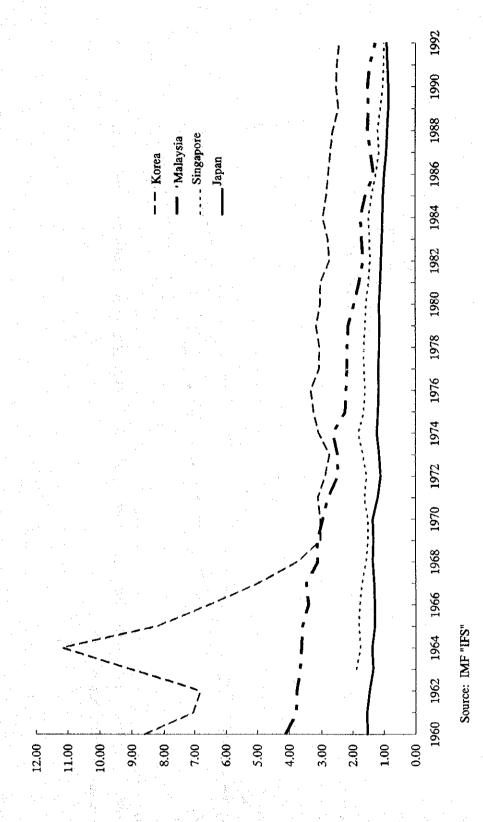


Figure 7-2 COMPARISON OF INCOME VELOCITY OF BROAD MONEY (2)

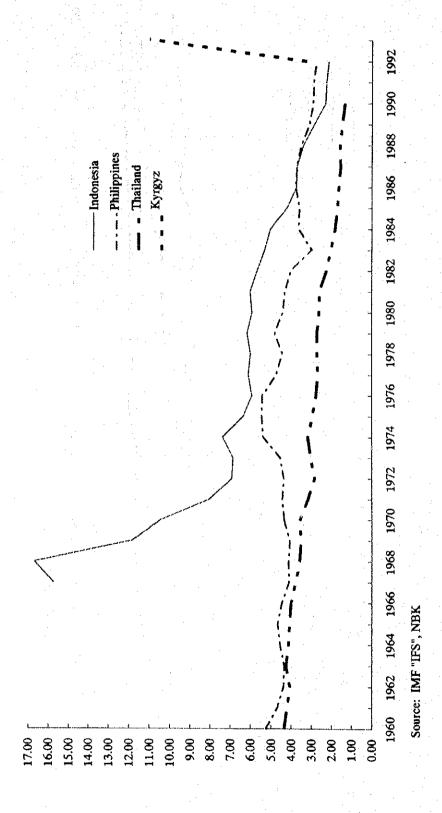


Figure 7-3 COMPARISON OF QUASI-MONEY/BROAD MONEY RATIO (1)

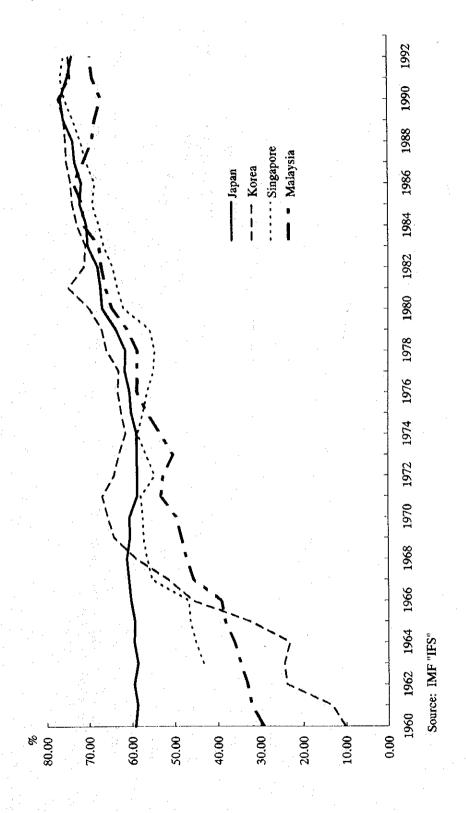
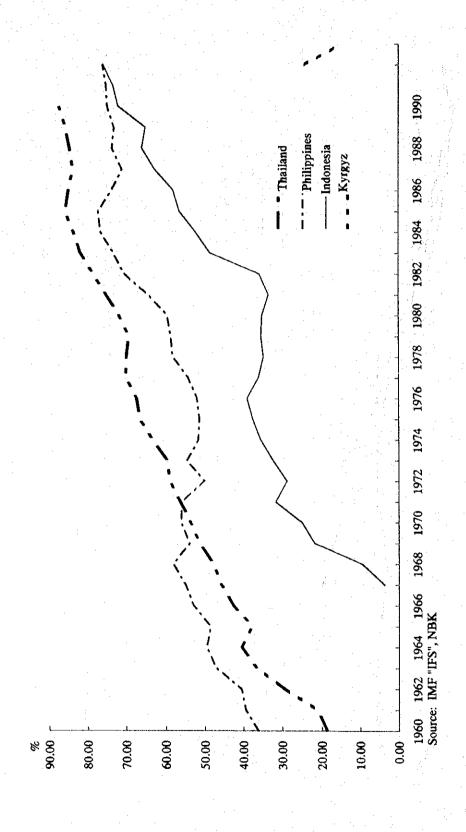


Figure 7-4 COMPARISON OF QUASI-MONEY/BROAD MONEY RATIO (2)



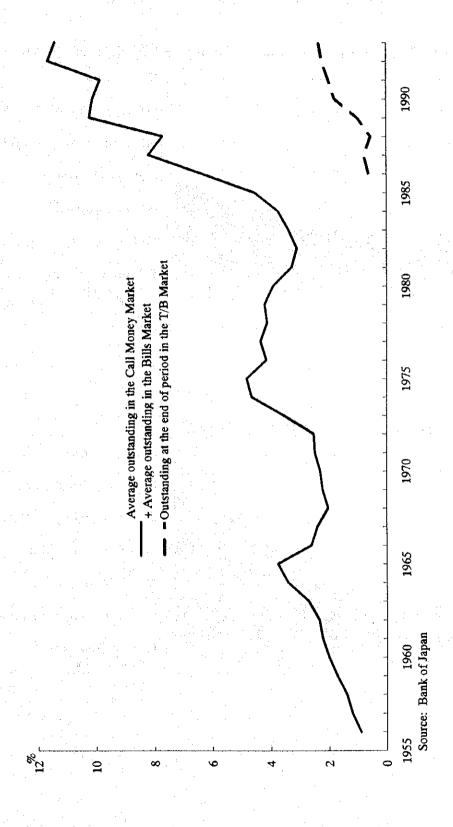
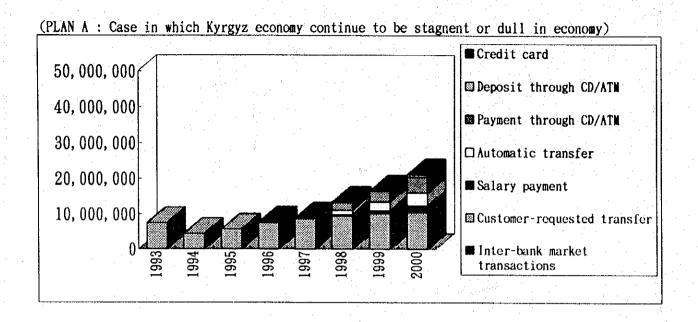


Figure 7-6 TOTAL NUMBER OF PAYMENT TANSACTIONS



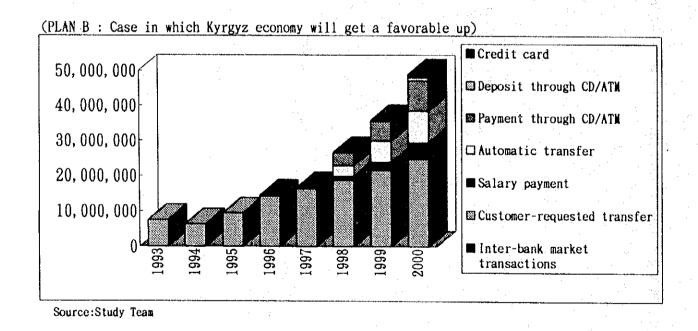


Figure 7-7 TRANSACTION VOLUME ANALYSIS

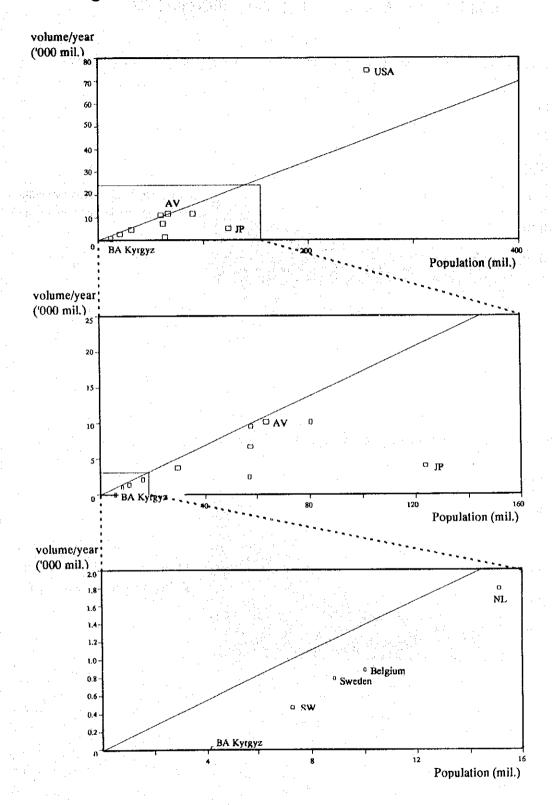
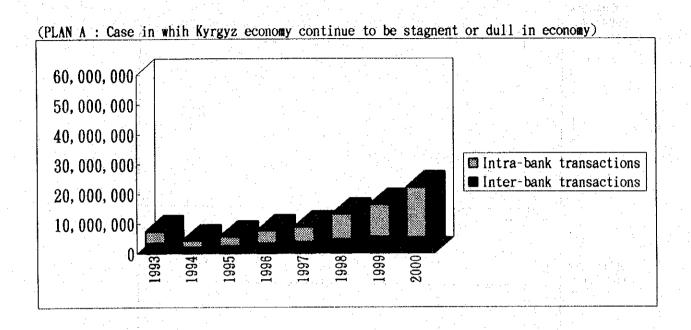


FIGURE7-8 INTRA-BANK / INTER-BANK TRANSACTIONS



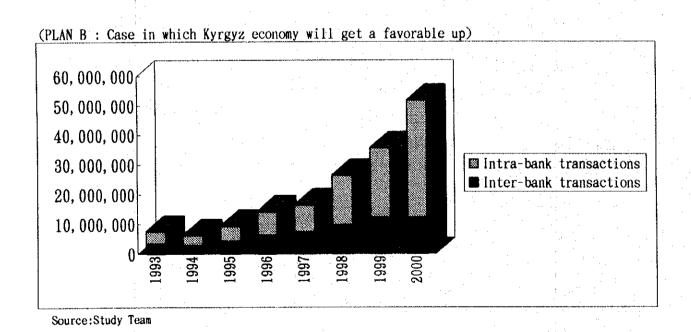


Figure 8-1 FINANCIAL INSTITUTIONS FOR THE FINANCIAL SYSTEM TOWARD THE YEAR 2000

* Central Bank (NBK) Development Bank Banks for SMIs * Governmental Financial Institutions Export & Import Bank Commercial Banks Long-term Financial Institutions Deposit Handling Financial Institutions for SMIs Institutions Foreign Banks (Branches) - (Local Office) Financial Intermediaries * Public Non-deposit Handling Insurance Companies Financial Institutions Institutions

Securities Companies

Other Financial Institutions

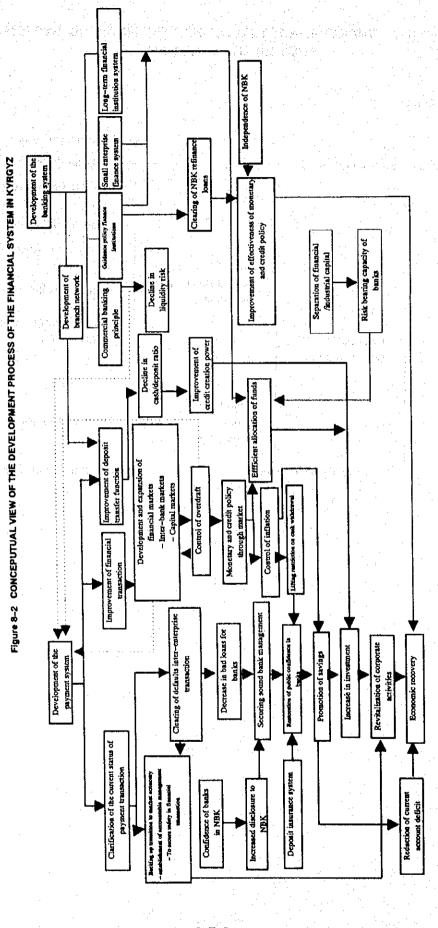


Figure 9-1 CONCEPTUAL DESIGN OF THE PAYMENT SYSTEM IN KYRGYZ

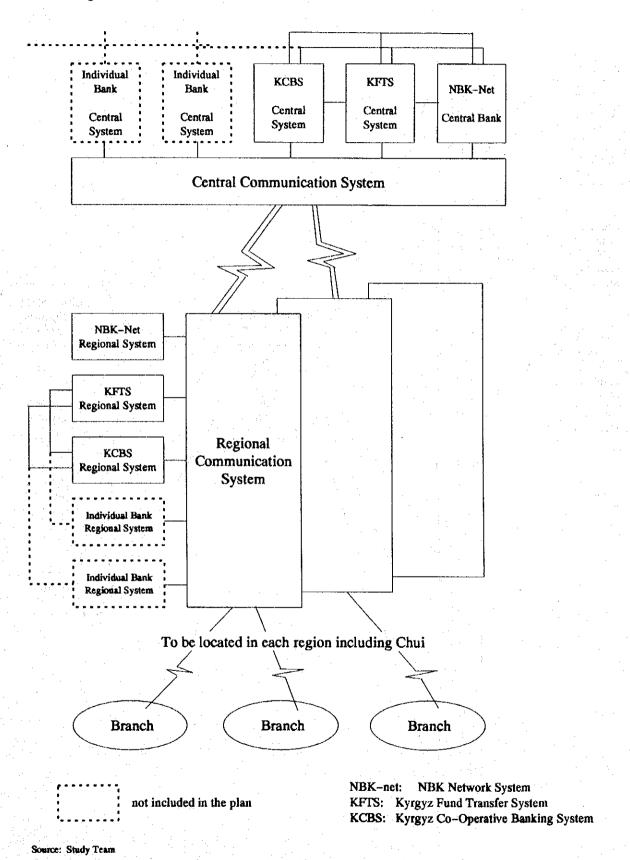
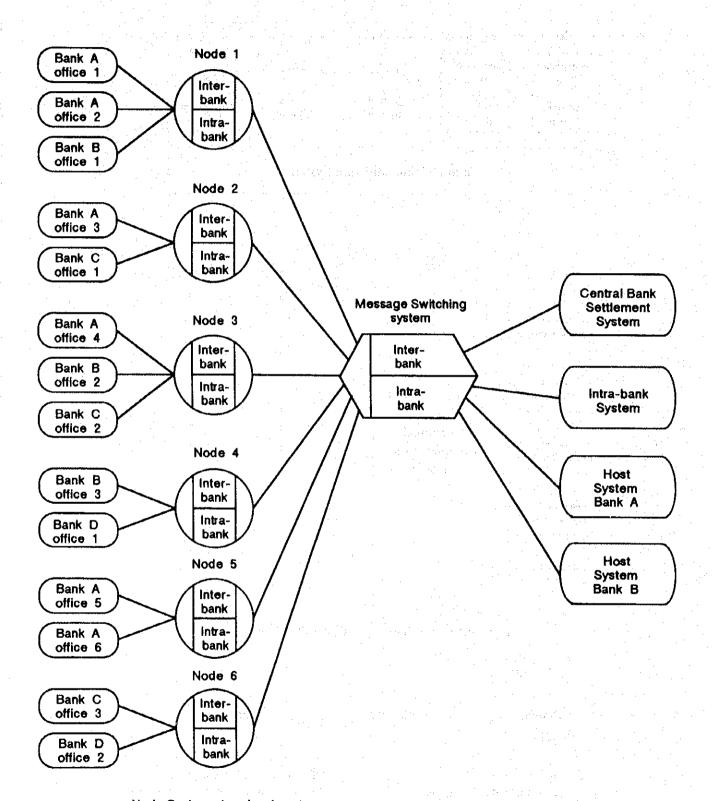
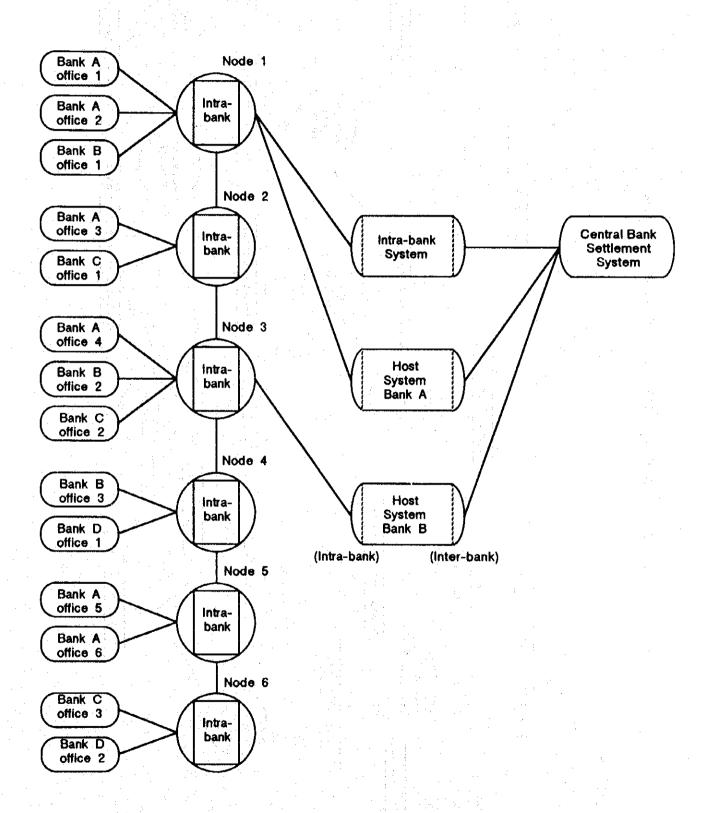


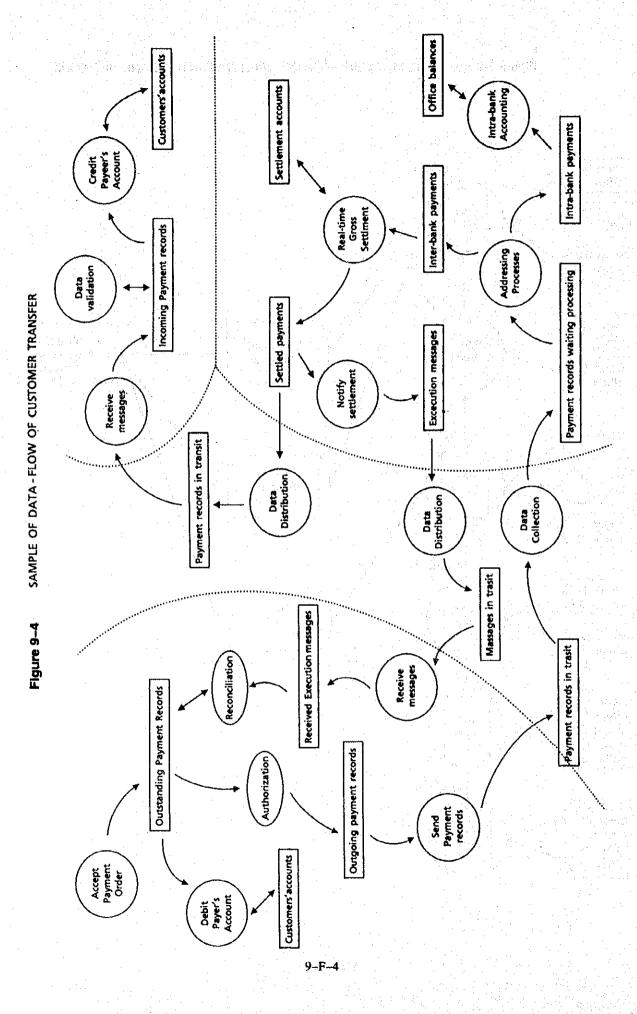
Figure 9-2 NETWORK MODELING FOR INTER AND INTRA-BANK NETWORK



Node System at regional centers

Figure 9-3 NETWORK MODELING FOR CO-OPERATIVE INTRA-BANK NETWORK





# TECHNICAL AREA AND SUBSYSTEMS FOR COMPUTERIZED PAYMENT SYSTEM

## 1. User Interface Area

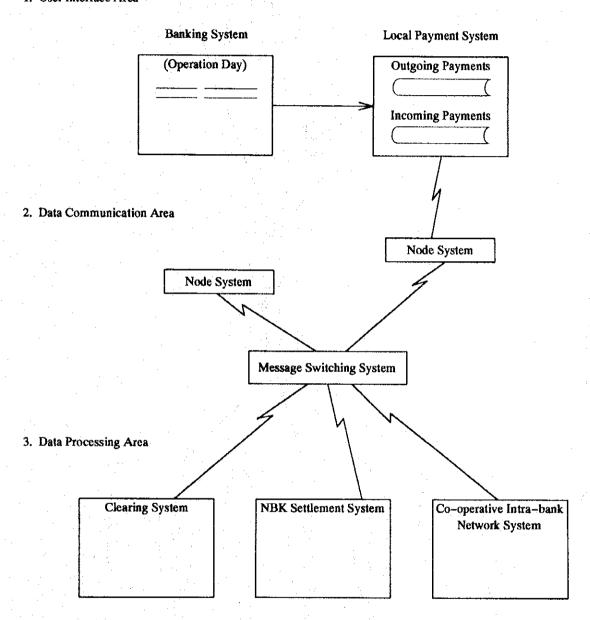
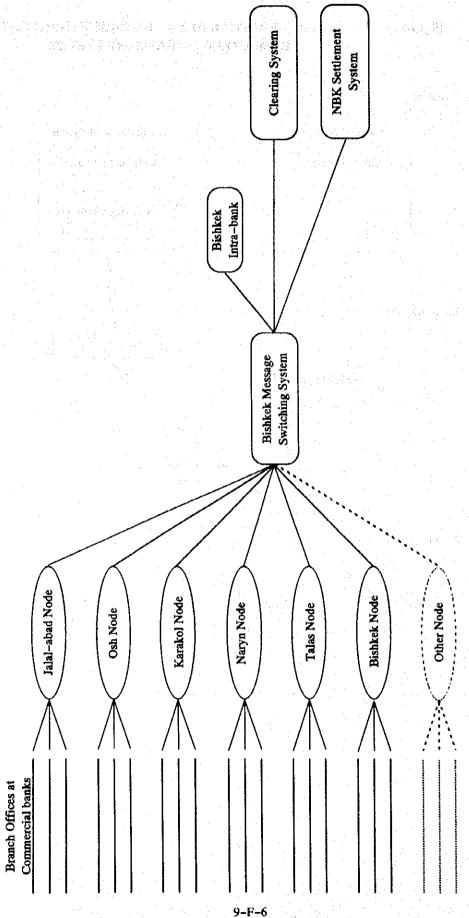
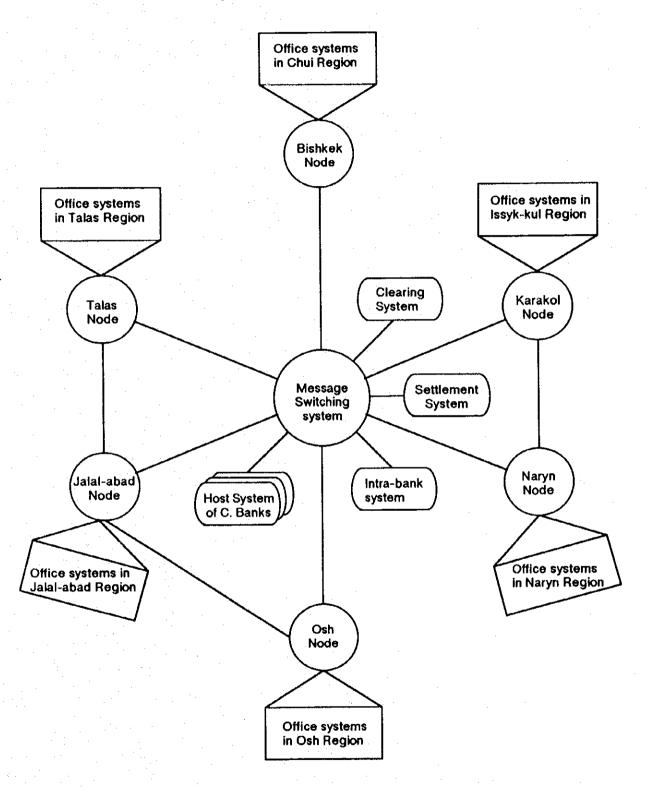


Figure 9-6 MODEL OF COMPUTER NETWORK

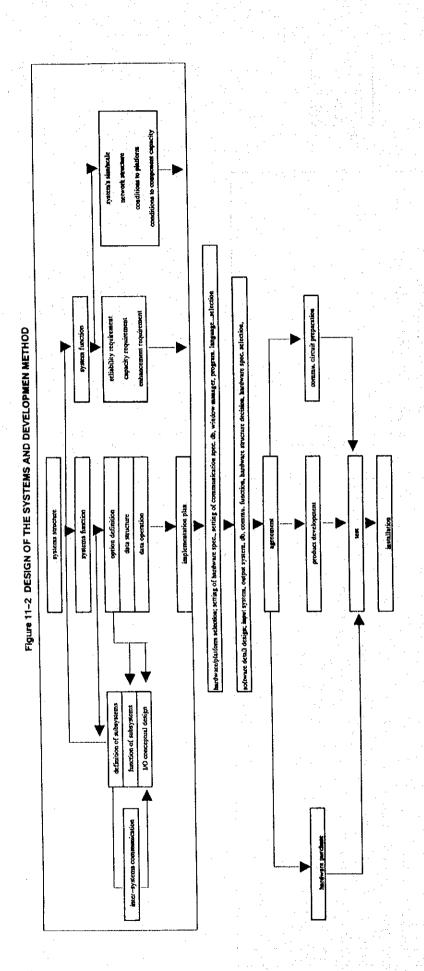




N.B. C. BANKS: Commericial Banks

# Figure 11-1 DESIGN AREA AND THE PROCESS FOR THE PROJECT

									DEVELOP-	MENT	WORK		
DETAIL DESIGN	DETAIL DESIGN OF DATABASE	DESIGN OF PROCESS STRUCTURE	COMMUNICATION DESIGN OF INTER-PROCESS	DETAIL DESIGN OF INPUT	DETAIL DESIGN OF OUTPUT	DESIGN OF SYSTEMS OPERATION	DESIGN OF NETWORK OPERATION						
				\$ 	• • •				4	<u> </u>		:	
PREPARATION OF IMPLEMENTATION	SELECTION OF DATABASE	SELCTION OF DEVELOPMENT TOOL	SELCTION OF DEVELOPMENT LANGUAGE	SELECTION OF MIDDLEWARE	SELECTION OF GUI	SELECTION OF OUTPUT SYSTEM		SELECTION OF PLATFORM	SELECTION OF COMMUNICATION SYSTEM	COMMUNICATION EQUIPMENT	PROTOCOL	CIRCUIT USE/SERVICES	
	· [								4	<u></u>			
THE PROJECT		OBJECT DESIGN	DATA STRUCTURE	OPERATION	DEFINITION OF SUBSYSTEM	COMMUNICATION INTER-SUBSYSTEM	CONCEPTUAL DESIGN OF INPUT	CONCEPTUAL DESIGN OF OUTPUT	CONDITION SETTING TO THE SYSTEM	CONDITION SETTING TO THE NIWORK	HARDWARE/SETTING PLATFORM	REQUIREMENT	
										1	1-F	1-1	



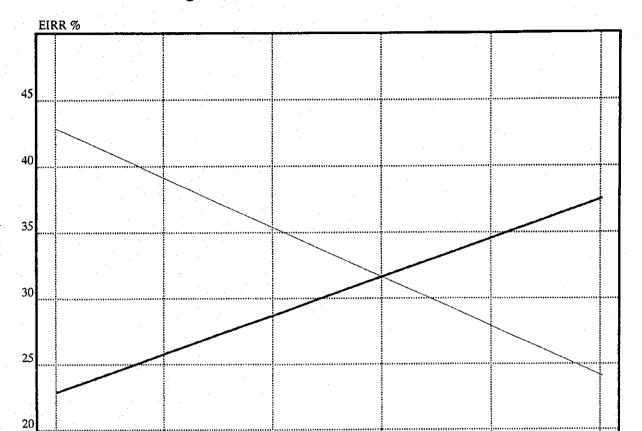


Figure 14-1 SENSITIVITY ANALYSYS OF EIRR

Benefit

-20 %

15

-30 %

Net Benefit Investment cost Base

-10 %

+20 %

+10 %

