Chapter IV

Comparative Study of Different Schemes

4.1 There are five major publicly subsidized health Schemes in Thailand they are :

* Public Assistance or Low Income Card Scheme (PA)
* Civil Servants Medical Benefits Scheme (CSMES)
* Social Security Scheme (SSS)
* Workmen's Compensation Scheme (WCS)
* Voluntary Health Card Scheme (HCP)

They monitoring tool will be applied for PA and HCP first and then as enough data received only per two schemes of SSS and WCS they are analyzed.

4.2 Public Assistance

Policies regarding the Low Income Card Scheme have been developed under several governments. The first initiative was in 1975, the government aimed to reduce inequity by providing free medical care to the low income population. Means tests were developed based on cash income to define the cut of point for the eligibility. At first, the low income was defined as any individual with income less than 1,000 baht a month. By 1981, that the low income cards were being issued to 10.9 million poor who passed the means test (about 23%.of the total population).

After the 1983 International Year for the Elderly, health utilization statistics for the elderly were collected. At least four types of elderly were identified with regard to payment for health services : self-pay, the civil servant medical benefit, the low income card holders and type B low income. It was until 1992 that the explicit policy of free care for the elderly was announced in the Ministry of Public Health's Regulations. In 1993, the policies have expanded to cover children under 12 year old, the handicapped and religious leaders. In 1994, the scheme changed its name from the medical welfare scheme for the low income to the medical welfare scheme for the

underprivileged groups. For purposes of the LICS there are six types of people classified as underprivileged:

* The low income card holders (the poor),
* The elderly,
* Children under 12 year old,
* Veterans,
* Religious and community leaders,
* The handicapped.

4.3 Health Card Project

The voluntary Health Card Scheme has been in operation more than 16 years. At its inception in 1983, the health card was innovated to complement the four elements of primary health care (i.e. mother and child health (MCH), expanded program on immunization (EPI), essential drug and simple treatment). The prepaid health card was experimented to noise fund for the Village Mother and Child Health Development Fund and entitled card holders to free treatment, MCH and EPI activities. The next phase of VHCS started with the changing from the principle of community financing to voluntary health insurance. When the country moved into sex national plan, the health card scheme has been renamed "the Voluntary health insurance project. Later in 1993, the scheme has received government subsidy in the form of matching

Table 4.1 Unweighted Individual Scores for Indicators and Sum of Different Health Schemes Against Sustainability and Efficiency

Indicators / Schemes / Year		Financial Sustainability			Technical Efficiency							Economic Efficiency												Allocation Efficiency			Total Scores	
		P/C of GDP	P/C of T.R.H.E	P/C of Recovered	ALS Pub	ALS Pri	Op. Pub	Op. Pri	IP. Pub	IP. Pri	P/C of IM	P/C Coverage	P/C of PE T.R.H.E	D&S P/C T.H.R.E	GDP P/C T.H.R.E	NR Pr Bed	Drperbed	Bed Pri	Bed Pub	Bed Cost Pub	Bed Cost Pri	Paid to Hos.	Ind. Pr.D. of T.R.H.E.	% PHC of T.R.H.E.	% CDC of T.R.H.E.	% EPI of T.R.H.E.	Sustainability	Efficiency
1996	PA	4	4	4	3		4		2	-	-	4	?	3	3	3	3	-	3	4		4	2				12	40
	CSMBS	4	4	4	-	-	-	-	-	-	-	3	-	-	-	-	-	-	-	-	-	4	-				12	7
	SSS	4	4	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	4	-				12	8
	WCF	4	4	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	4	-				12	8
	HCP	3	3	3	3		4	-	4	-	-	3	3	3	4	3	3	-	3	4	-	3	2				8	42
	PI	4	4	4	-	-	-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	4	-				12	8
	NON I	4	4	4	-		-	-	-	-	-	4	-	-	-	-	-	-	-	-	-	4	-				12	8
1997	PA	4	4	4	3		4		3			4	2									4	2				12	42
	CSMBS	4	4	4								3										3					12	6
	SSS	4	4	4								4										4					12	8
	WCF	4	4	4								4										4					12	8
	HCP	3	3	3	3		4		4			4	3	3	4	3	3		3	4		2	2				9	42
	PI	3	3	3								2										2					9	4
	NON I	4	4	4								3										3					12	6
1998	PA	5	5	5	3		4		3			5	2	3	4	3	3		3	4		5	2				15	44
	CSMBS	2	2	2								3										3					6	6
	SSS	4	4	4								2										4					12	6
	WCF	4	4	4								2										4					12	6
	HCP	3	3	3	3		4		4			4	3	3	4	3	3		3	4		2	2				9	42
	PI	2	2	2								2										2					6	4
	NON I	2	2	2								3										3					6	6

1. Scores will be 1-5 for each indicator (3 = no change 1 and 2 = decreases 4 and 5 = increase)

2. Then they will be weighed against criteria (validity = 2 reliability = 5 and interpretability = 5)

3. Total scores of each schemes will be compared for 1996-1997 and 1998

4. Total weighed scores show how different schemes cope with the economic crisis which guide policy makers and managers

5. WCF will be assessed against (1) (6) (13)

Note: Scores and their weight are usually determined by agroup of experts

Table 4.2 Indicators Weighted Against Validity Criteria

Indicators / Schemes / Year		Financial Sustainability			Technical Efficiency							Economic Efficiency												Allocation Efficiency			Total Scores	
		P/C of GDP	P/C of T.R.H.E	P/C of Recovered	ALS Pub	ALS Pri	Op. Pub	Op. Pri	IP Pub	IP Pri	P/C of IM	P/C Coverage	P/C of PE T.R.H.E	D&S P/C T.H.R.E	GDP P/C T.H.R.E	NR Pr Bed	Drperbed	Bed Pri	Bed Pub	Bed Cost Pub	Bed Cost Pri	Paid to Hos	Ind. Pr D. of T.R.H.E	% PHC of T.R.H.E	% CDC of T.R.H.E	% EPI of T.R.H.E	Sustainability	Efficiency
1996	PA	2	2	2	2	-	2	-	2	-	-	2	2	2	2	2	2	-	2	2	-		2				24	80
	CSMBS	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	19
	SSS	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	16
	WCF	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	16
	HCP	2	2	2	2	-	2	-	2	-	-	2	1	2	2	2	2	-	2	2	-	2	-				16	84
	PI	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	16
	NON I	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	16
1997	PA	2	2	2	2	-	2	-	2	-	-	2	-	2	2	2	2	-	2	2	-	2	2				24	89
	CSMBS	2	2	2	2	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	12
	SSS	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-				24	16
	WCF	2	2	2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	-				24	16
	HCP	2	2	2	2	-	2	-	2	-	-	2	2	2	2	2	2	-	-	2	-	2	2				18	84
	PI	2	2	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-				24	8
	NON I	2	2	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-				24	12
1998	PA	2	2	2	2	-	2	-	2	-	-	2	2	2	2	2	2	-	2	2	-		2				30	88
	CSMBS	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				12	12
	SSS	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	12
	WCF	2	2	2	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	-	2	-				24	12
	HCP	2	2	2	2	-	2	-	2	-	-	2	1	2	2	2	2	-	2	-	1		2				18	84
	PI	2	2	2	-	-		-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-				12	8
	NON I	2	2	2	-	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	2	-				12	12

1 Scores will be 1-5 for each indicator (3 = no change 1 and 2 = decreases, 4 and 5 = increase)

2 Then they will be weighed against criteria (validity = 2 reliability = 5 and intrepretability = 5)

3 Total scores of each schemes will be compared for 1996, 1997 and 1998

4 Total weighed scores show how different schemes cope with the economic crisis which guide policy makers and managers

5 WCF will be assessed against (1) (6) (13)

Note Scores and their weigh t are usually determined by agroup of experts

Table 4.3 Indicators Weighted Against Comparability Criteria

Indicators / Schemes / Year		Financial Sustainability			Technical Efficiency							Economic Efficiency												Allocation Efficiency			Total Scores	
		P/C of GDP	P/C of T.R.H.E	P/C of Recovered	ALOS Pub	ALOS Pri	Opr. Pub	Opr. Pri	IP. Pub	IP. Pri	P/C of IM	P/C Coverage	P/C of PE T.R.H.E	D&S P/C T.H.R.E	GDP P/C T.H.R.E.	NR Pr Bed	Drperbed	Bed Pri	Bed Pub	Bed Cost Pub	Bed Cost Pri	Paid to Hos.	Ind. Pr D. of T.R.H.E.	% PHC of T.R.H.E.	% CDC of T.R.H.E.	% EPI of T.R.H.E	Sustainability	Efficiency
1996	PA	5	5	5	4		5		5	-		5	5	-	-	5	5	-	5	5	-	5	5				1.5	5.5
	CSMBS	5	5	5								5										5					1.5	1
	SSS	5	5	5								5										5					1.5	1
	WCF	5	5	5								5										5					1.5	1
	HCP	5	5	5	5	-	5	-	5	-		5	5	-	-	5	5	-	5	5	-	5	5				1.5	5.5
	PI	5	5	4								5										5					1.5	1
	NON I	5	5	5						1		5										5					1.5	1
1997	PA	5	5	5	5	-	5	-	5	-		5	5	-	-	5	5	-	5	5	-	5	5				1.5	5.5
	CSMBS	-	-	5								5										5					1.5	5
	SSS	-	-	5								5										5					1.5	5
	WCF	-	-	5								5										5					1.5	5
	HCP	5	5	5	5	-	5	-	5	-		5	5	-	-	5	5	-	5	5	-	5	5				1.5	5.5
	PI	5	5	5								5										5					1.5	1
	NON I	5	5	5								5										5					1.5	1
1998	PA	5	5	5	5		5	-	5	-		5	5	-	-	5	5	-	5	5	-	5	5				1.5	5.5
	CSMBS	-	-	5								5										5					1.5	5
	SSS	-	-	5						1		5										5					1.5	5
	WCF	-	-	5								5										5					1.5	5
	HCP	5	5	5	5	-	5	-	5	-		5	5	-	-	5	5	-	5	5	-	5	5				1.5	1
	PI	5	5	5								5										5					1.5	1
	NON I	5	5	5								5										5					1.5	1

1. Scores will be 1-5 for each indicator (3 = no change, 1 and 2 = decreases, 4 and 5 = increase)

2. Then they will be weighed against criteria (validity = 2, reliability = 5 and interpretability = 5).

3. Total scores of each schemes will be compared for 1996-1997 and 1998.

4. Total weighted scores show how different schemes cope with the economic crisis which guide policy makers and managers.

5. WCF will be assessed against (1) (6) (13)

Note: Scores and their weight are usually determined by a group of experts.

Table 4.4 Indicators Weighted Against Interpretability Criteria

Schemes / Indicators / Year		Financial Sustainability			Technical Efficiency							Economic Efficiency												Allocation Efficiency			Total Scores	
		P/C of GDP	P/C of T.R.H.E	P/C of Recovered	ALS Pub	ALS Pri	Op. Pub	Op. Pri	IP. Pub	IP. Pri	P/C of IM	P/C Coverage	P/C of PE T.R.H.E	D&S P/C T.H.R.E	GDP P/C T.H.R.E.	NR Pr Bed	Drperbed	Bed Pri	Bed Pub	Bed Cost Pub	Bed Cost Pri	Paid to Hos.	Ind. Pr D. of T.R.H.E.	% PHC of T.R.H.E.	% CDC of T.R.H.E.	% EPI of T.R.H.E.	Sustainability	Efficiency
1996	PA	.5	.5	.5	.5	-	.5	-	.5	-		.5	.5	-	.5	.5	.5	-	.5	.5		.5	.5				1.5	7
	CSMBS	.5	.5	.5								.5										.5					1.5	1
	SSS	.5	.5	.5								.5										.5					1.5	1
	WCF	.5	.5	.5								.5										.5					1.5	1
	HCP	.5	.5	.5	.5	-	.5		.5	-		.5	.5	-	.5	.5	.5	-	.5	.5		.5	.5				1.5	7
	PI	-	-	-								.5										.5					-	1
	NON I	-	-	-								.5										.5					-	1
1997	PA	.5	.5	.5	.5	-	.5	-	.5	-		.5	.5	-	.5	.5	.5	-	.5	.5		.5	.5				1.5	7
	CSMBS	.5	.5	.5								.5										.5					1.5	1
	SSS	.5	.5	.5								.5										.5					1.5	1
	WCF	.5	.5	.5								.5										.5					1.5	1
	HCP	.5	.5	.5	.5	-	.5		.5	-		.5	.5	-	.5	.5	.5	-	.5	.5		.5	.5				1.5	9
	PI	-	-	-								.5										.5					-	1
	NON I		-	-								.5										.5					-	-
1998	PA	.5	.5	.5	.5	-	.5	-	.5	.5		.5	.5	.5	.5	.5	.5	-	.5	.5		.5	.5				1.5	7
	CSMBS	.5	.5	.5								.5										.5					1.5	1
	SSS	.5	.5	.5								.5										.5					1.5	1
	WCF	.5	.5	.5								.5										.5					1.5	1
	HCP	.5	.5	.5	.5		.5		.5	-		.5	.5	.5	.5	.5	.5	-	.5	.5		.5	.5				1.5	7
	PI		-									-										-					-	-
	NON I	-	-	-								-										-					-	-

1. Scores will be 1-5 for each indicator (3 = no change 1 and 2 = decreases, 4 and 5 = increase)

2. Then they will be weighed against criteria (validity = 2, reliability = 5 and interpretability = 5)

3. Total scores of each schemes will be compared for 1996 1997 and 1998

4. Total weighed scores show how different schemes cope with the economic crisis which guide policy makers and managers

5. WCF will be assessed against (1) (6) (13)

Note: Scores and their weigh care usually determined by agroup of experts

Table 4.5 Weighted Sums of Individual Criteria Scores

Indicators / Schemes / Year		Financial Sustainability			Technical Efficiency							Economic Efficiency												Allocation Efficiency			Total Scores	
		P/C of GDP	P/C of T.P.H.E	P/C of Recovered	ALS Pub	ALS Pri	Op. Pub	Op. Pri	IP Pub	IP Pri	P/C of IM	P/C Coverage	P/C of PE T.R.H.E.	D&S P/C T.H.R.E	GDP P/C T.H.R.E	NR Pr Bed	Drperbed	Bed Pri	Bed Pub	Bed Cost Pub	Bed Cost Pri	Paid to Hos.	Ind. Pr.D. of T.R.H.E.	% PHC of T.R.H.E.	% CDC of T.R.H.E.	% EPI of T.R.H.E.	Sustainability	Efficiency
1996	PA	12	12	12	9	-	9	-	9	-		12	6	9	9	9	9	-	12	12	-	9	6				36	117
	CSMBS	12	12	12								9										12					36	21
	SSS	12	12	12								12										12					36	24
	WCF	12	12	12								12										12					36	24
	HCP	9	9	6	9	-	12		12			9	9	9	12	9	9	-	12	12		9	6				24	126
	PI	12	12	12								12										12					36	24
	NONI	12	12	12								12										12					36	24
1997	PA	12	12	12	9		12		9			12	6	9	12	9	9	-	12	12	-	12	6				36	126
	CSMBS	12	12	12								12										12					36	24
	SSS	12	12	12								12										12					36	24
	WCF	12	12	12								12										12					36	24
	HCP	9	9	9	9		12		12			12	9	9	12	9	9	-	12	12		6	6				27	132
	PI	9	9	9								6										6					27	12
	NONI	12	12	12								9										9					36	18
1998	PA	15	15	15	9		12		9			15	6	7.5	7.5	12	9		12	12		15	6				45	132
	CSMBS	5	5	5								9										9					15	18
	SSS	10	10	10								6										12					30	18
	WCF	10	10	10								6										12					30	18
	HCP	9	9	9	9		12		9			8	3	7.5	7.5	12	9		12	12		6	6				27	113
	PI	5	5	5								5										6					15	11
	NONI	5	5	5								5										9					15	11

1. Scores will be 1-5 for each indicator (3 = no change, 1 and 2 = decreases, 4 and 5 = increase)

2. Then they will be weighed against criteria (validity = 2, reliability = 5 and interpretability = 5)

3. Total scores of each schemes will be compared for 1996-1997 and 1998

4. Total weighed scores show how different schemes cope with the economic crisis which guide policy makers and managers

5. WCF will be assessed against (1, 15, 19)

Note: Scores and their weight are usually determined by a group of experts

1. Unweighted sustainability of PA in 1998 increased by 25%. During the crisis because government allocated more to vulnerable's treatment. In previous years also increased by 3 scores.

   1.1 weighted sustainability of PA shows similar changes

   1.2 Efficiency of P.A Schemes increased by 2 scores in 1997 and 1998

2. Unweighted financial sustainability of HCP increased by 1 score in 1997 and remained unchanged during 1998.

2.1 Weighted financial sustainability of HCP increased by 1 score in 1997 and remained unchanged during 1998

2.2 Unweighted efficiency of HCP for 1996 was 42 scores remained unchanged during 1997 and 1998

Unchanged scores across the years for unweighted financial sustainability was 9 for both schemes, and unweighted efficiency for both schemes was 39.

Ratio of efficiency scores to financial sustainability scores of P.A was 3.33 in 1996, 3.50 in 1997 and 2.93 in 1998

2.3 Ratio of efficiency scores to financial sustainability of HCP was 5.25 in 1996, 4.67 in 1997 and 4.67 in 1998.

The figures show a proportionally decreasing efficiency for both schemes, and as these two schemes only are using public sector services, it can be concluded that efficiency of public sector decreased during the crisis.

Economic crisis has not terminated yet, so enough data about its impact on crisis has not yield, also enough Health economist for scoring and weighting them were not available during the study period. So as suggested in thesis proposal only two schemes were scored and weighted against validity, reliability and interpretability criteria and other schemes only scored for their financial sustainability and P/C of coverage and their payment to hospitals.

4.4 Social Security and Workman's Compensation Schemes

Social Security Scheme (SSS) and Workman Compensation Scheme (WCS) are both administered by the Social Security Office (SSO) and the beneficiaries are largely the same-only the benefits they receive under each scheme differ, as well as the financing mechanism for each scheme. The SSS started in 1990 and covers non-work related sickness, maternity and invalidity, plus a cash benefit 50 percent of wages and death. The SSS is financed from tripartite contributions from employers employees, and government, equal to 1.5 percent of the employees' wages. The contribution level in 1998 was reduced to 1.0 percent of wages due to the economic crisis. Under the SSS providers are paid based on Single flat rate capitation (1,000 baht per capita per annum) inclusive for ambulatory and hospital care. Workers covered under SSS need to register with contractor hospitals.

According to social security since 1993, establishments with more than 10 employees were registered with SSO.

Revenues of SSF which was 0.017 percent of GDP in 1996 increased to 0.027 percent in 1997 but decreased to 0.021 percent of GDP in 1998, (Table 6), this consistent with droping of number of insured that was 5.57 for 1996, 6.08 for 1997 and 5.42 in 1998 (Table 4.7) caused by to growth of unemployment and decrease of each partes from 1.5 percent to 1 percent of payrall during the economic crisis.

Table 4.6 Percent of Social Security Fund Revenues of GDP

	SSF Revenue	GDP	P/C of GDP
1996	13,027	76,650	0.017
1997	21,477	79,274	0.027
1998	17,606	82,941	0.021

Sources : National Economic and Social Development Board, 1998.

Table 4.7 Number of insured and Establishments of Social Security Fund

No. insured millions			No. Establishment		
1996	1997	1998	1996	1997	1998
5.57	6.08	5.42	82,572	90,656	93,903

Sources : SSO, 1997 Annual Report

SSO, 1998 Report Unpublished

Change of revenues and expenses of SSF are shown in Table 4.8 revenues increased by 12.87 percent in 1997 but decreased to 18 percent in 1998 expenses in creased 63 percent in 1997 but decreased 24 percent in 1998 (Table 4.8) and (Figures 4.1 and 4.2)

Balance of revenues which was 64 percent in 1996 decreased to 48.6 percent in 1997 but increased to 52.5 percent in 1998 this suggest s that both revenues and expenses changed but SSF was financially sustainable despit seminished employment rate and share of each party during the crisis. Number of services increased by 16.9 percent and 9.2 percent and in 1997 and 1998 (Table 4.9)

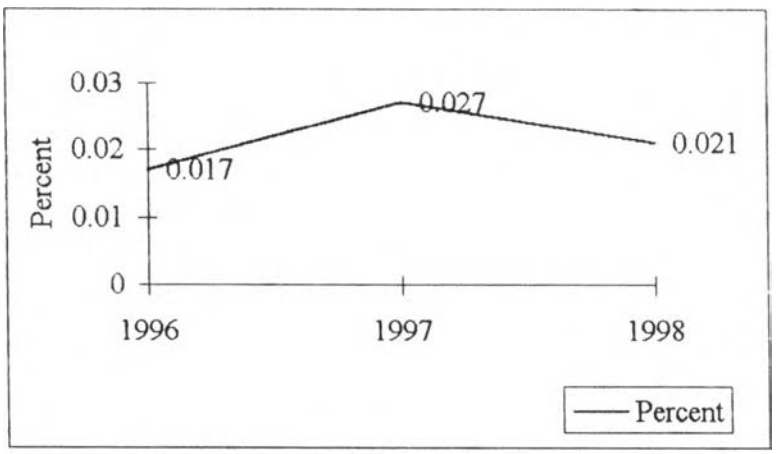
Table 4.8 Revenues and Expenditures of Social Security Fund million baht

Year	Revenues	Exp.
1991	3,039	986
1992	6,274	2,153
1993	9,714	2,737
1994	13,787	4,060
1995	15,501	4.632
1996	19,027	6,760
1997	21,477	11,045
1998	17,606	8,363

Sources : SSO. 1997 Annual Report

SSO. 1998 Annual Report Unpublished

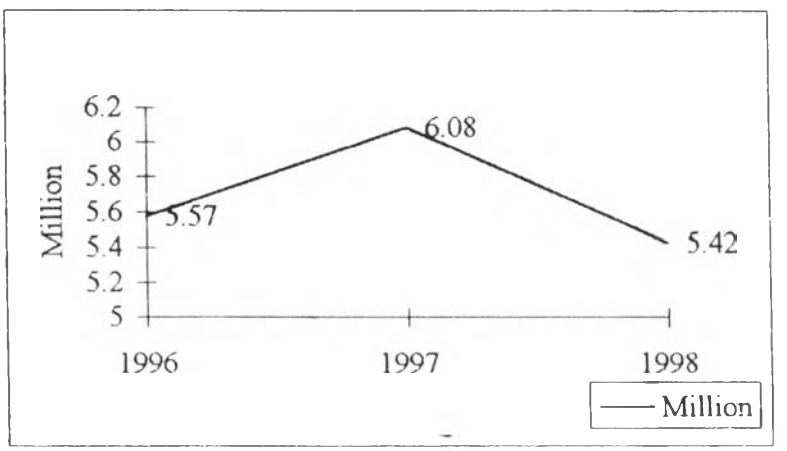
Figure 4.1 Percent of GDP Social Security Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Unpublished

Figure 4.2 Number of Insured Social Security Scheme



Sources . SSO, 1997 Annual Report

SSO, 1998 Annual Unpublished

Average revenues received per each insured was 3,415 baht and 3,532 baht in 1996 and 1996 but dropped to 3,248 baht in 1998 and average expense incurred for each service was 1,071 baht and 1967 baht but in 1996 and 1997 but decreased to 1,543 baht in 1998. Outpatients utilitzation rate of public facilities which was 1.17 in 1996 and 1.44 in 1997 but deminished to 1.40 in 1998 (Table 4.9). Inpatients utilization rate of public facilities that was .029 and .032 in 1996 and 1997 declined to .032 in 1998. Outpatient utilization rate of private facilities which was 1.45 and 1.59 in 1996 and 1997 declinded to 1.50 in 1998 and inpatient's utilization rate of private facilities that was 0.31 and declind to 0.33 in 1998. Which shows that both inpatients and outpatients used more public facilities during the crisis, this is an evidence of higher income elasticity of private facilities and may be the sign of a change of policy in SSF to use lower price facilities. Total utilization rate of outpatients and inpatients decreased during the crisis (Figure 4.3, 4.4 and 4.5).

Medical services increased by 17 percent and 9.5 percent in 1997 and 1998 (Table 4.10) which is consistant to the payment to hospitals despite decline of insured.

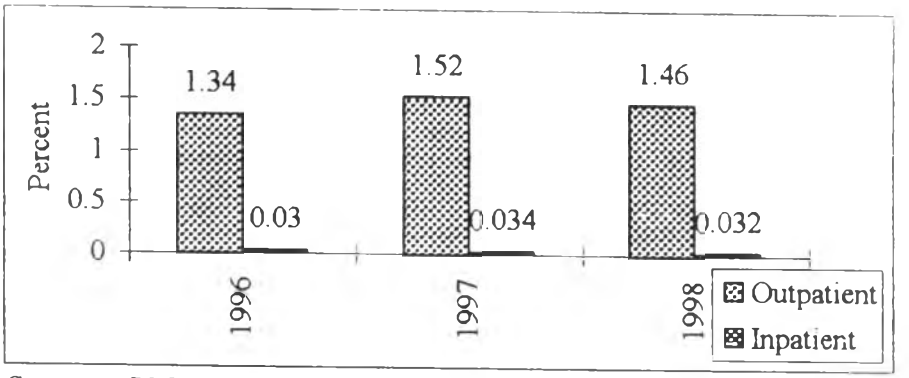
Table 4.9 Medical Utilization rate (visit/person/rate)

	1996	1997	1998
Out patient	1.34	1.52	1.46
Public	1.17	1.44	1.40
Private	1.45	1.59	1.50
Inpatient	0.030	0.034	0.032
Public	0.029	0.032	0.031
Private	0.031	0.035	0.033

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

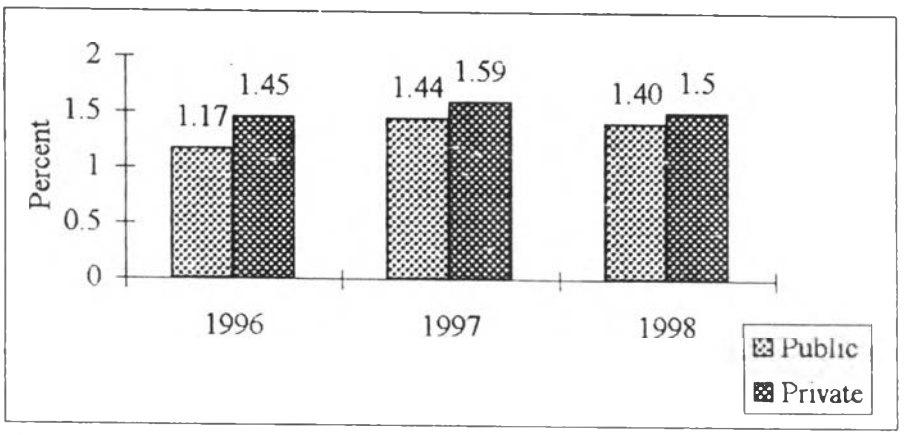
Figure 4.3 Total Utilization Rate Outpatient Inpatient Social Security Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Unpublished

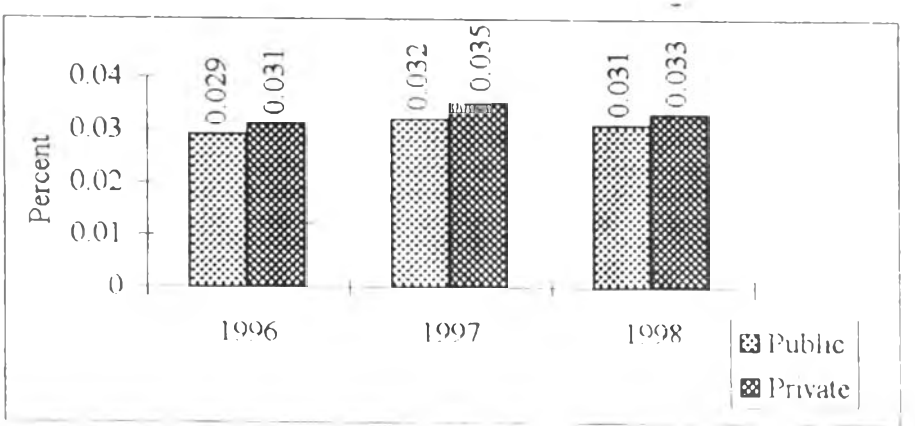
Figure 4.4 OutPatient Utilization Rate (Public-Private) Social Security Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Unpublished

Figure 4.5 Inpatient Utilization Rate Public Private Social Security Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Unpublished

Table 4.10 Medical Services Millions visit

	1996	1997	1998
Out patient	6.17	7.22	7.9
In patient	0.14	0.16	0.16
Total	6.31	7.38	8.06

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Combination of service utilizer suggests that (Table 4.12) percent of claims for sickness and invalidity increased while percent of maternity and death claims decreased during the crisis. Number of contracted public hospitals did not changed but number of private contracted hospitals increased in 1998. Number of main contractor increased in 1998 but number of subcontracors decreased in 1998 (Table 4.13). Total amount paid to hospitals increased, despite of number of insured (Table 4.14).

Table 4.11 Contributions and Benefits

Year	Contributions			%	Benefits	%
	Employer Person	Gov.	Total	of Change		of Change
1991	2,786	176	2,962		778	26.27
1992	4.396	1,620	6,018	103	2,057	34.17
1993	5,554	3,809	9,358	56	2,473	26.43
1994	7,603	4,539	12,172	30	3,773	31.00
1995	8,483	4,119	12,602	4	3,991	31.67
1996	10,156	5,078	15,234	21	6,239	40.95
1997			16,448	8	10,245	62.29
1998						

Sources : SSO, 1997 Annual Report

Table 4.12 Service Utilizers

Benefits	1996		1997		1998	
	No. of cases	P/C	No. of case	P/C	No. of cases	P/C
Sickness	6,370,000	95.47	7,623,682	97.37	8,693,891	97.84
Maternity	289,665	4.34	192,360	2.46	178,215	2.01
Death	11,200	0.17	13,369	0.17	13,038	0.15
Invalidity	277	0.004	349	0.005	527	0.006
Total	7,829,760	100				

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Table 4.13 Number of Contracted Hospitals

	1996	1997	1998
Main Contractors	198	196	205
Public	126	127	127
Private	72	69	78
Sub contractor	2,840	3,044	2,256

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Table 4.14 Total Amount Paid to Hospitals (million)

1996	% of change	1997	% of change	1998
3,912	4.4	4,086	38.5	5,657

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

4.5 Workman's Compensation Scheme

The WCS has developed gradually since 1973 it is an employer liability scheme where the annual contribution is 0.2-2 percent of annual wages depending on the risk of the industry. WCS employs experience rate based on loss ratio to penalize employers who have high compensation for death illness and injuries and provides a cash benefit at the level of 60% of wages and death compensation. The WCS pays providers on a fee-for-service basis with a baht 35,000 capita per case. Patients claiming health benefits under the WCS have free access to both public and private providers.

Another baht 50,000 extra-payment for high cost care provides reimbursement for seven exceptional conditions.

Revenues of WCF increased 21% and 37% in 1996 and 1997 but due to unemployment and diminish they rates from 0.2-2.0 percent of payroll to 0.2-1.0 percent ofter July 1997 but decreased 31% in 1998. Expenses of WCF increased by 27% and 61% in 1996 and 1997, decreased 18% in 1998 (Table 4.15) and (Figure 4.7).

Table 4.15 Workman's Compensation Fund Revenues – Expenses 1995-1998

Year	Revenues	Expenses	Balance	Percent
1995	2,072	1,370	702	34
1996	2,505	1,610	895	36
1997	3,425	1,987	1438	42
1998	2,376	1,826	550	23

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Which is consistent with changes of operation in 1996 and 1997 and decreasing rates of death, invalidity, partially loss of organs and incapacitated in 1998. Balance of WCF which was growing during 1995 to 1997 period, decreased in 1998 but remain positive and shows that WCF is financially sustainable despite of

economic crisis. Contribution to Fund which was increasing 22% per year in 1996 and 1997 dropped (Table 4.17) to 31% in 1998 which shows the unfavourate impact of Economic Crisis, compensation which was growing up 23% per year in 1996 and 1997 dropped (Table 4.17) to 8.8% in 1998, but percent of compensation to contribution increased from 89% in 1997 to 118% in 1998.

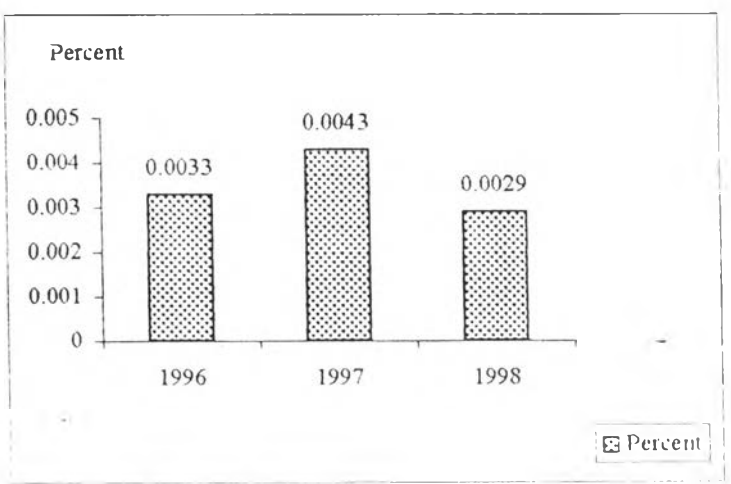
Table 16 Percent of Revenues of Workmen Compensation Fund to GDP

	WCF Revenue	GDP	Percent
1996	2,505	76,750	.0033
1997	3,425	79,274	.0043
1998	2,376	82,941	.0029

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Figure 4.6 Revenues as percent of GDP Workman's Compensation Scheme



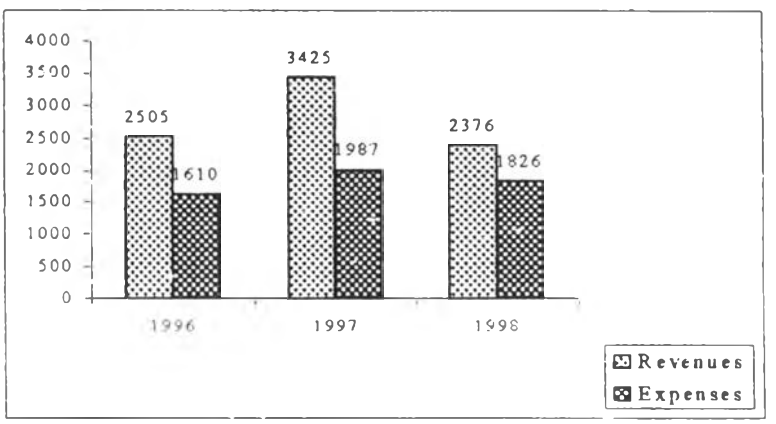
Sources : SSO, 1997, Annual Report

SSO, 1998 Annual Report Unpublished

Percent of revenues of WCF to GDP increased in 1997 but decreased in 1998 (Table 4.16 and Figure 4.6). Balance of revenues which was growing up by 36

percent and 42 percent in 1996 and 1997 years dropped to 23 percent in 1998 which is an evident of sustainability of this scheme during the crisis. Contributions collected in 1996 and 1997 increased by 22 percent for both years but dropped 31 percent in 1998 Benefits paid also were increasing by 23 percent in 1996 and 1997 but dropped to 8.8 percent in 1998. 88 and 89 percent of collected contributions, paid for benefit in 1996 and 1997 while this ratio escalated to 118 percent of in 1998 which shows that payment for benefit was excess to contribution in 1998.

Figure 4.7 Revenues and Expenses of Workman's Compensation Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Table 4.17 Workman's Compensation 1991-1998

Year	Contributions		Compensation benefits		Benefits
	-	% of change		% of change	% of Contributions
1991	653		624		95
1992	742		753		102
1993	921		927		102
1994	1,126		1,169		104
1995	1,398		1,370		98
1996	1,838	22	1,610	23	88
1997	2,235	22	1,986	23	89
1998	1,551	(31)	1,826	8.8	118

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Occupational death which were increasing decreased and invalidity decreased by 24.67 percent and 44 percent in 1998 and loss of organ decreased by 30 percent and in capacitality decreased more than 18 percent in 1998 (Table 4.18 and Figures 4.8, 4.9 and 4.10).

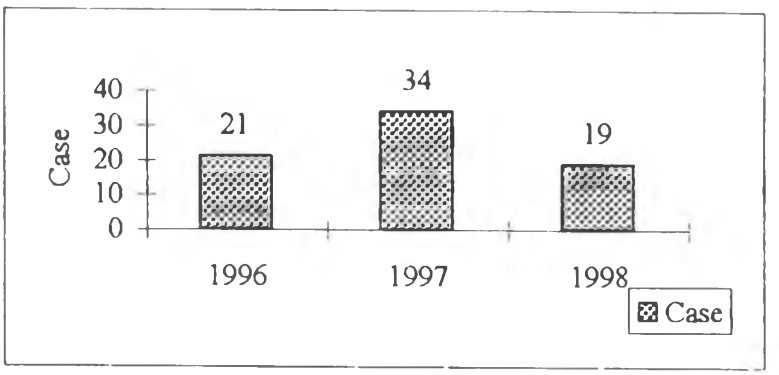
Table 4.18 Number of Occupational Inguries or Diseases Classified by Degree of Loss

	1996	%	1997	%	1998	%	% of change
Death	1,003	0.41	1,041	0.45	784	0.42	(24.67)
Invalidity	21	0.01	34	0.02	19	0.010	(44)
Partialy loss Of organs	5,107	2.08	5,305	2.30	3,692	1.98	(30)
> 3 days incapacitated	78,865	32.08	68,500	29.32	55,516	29.78	(18.95)
≤ 3 days incapacitated	160,820	65.42	155,566	67.51	126,434	67.81	(18.7)

Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

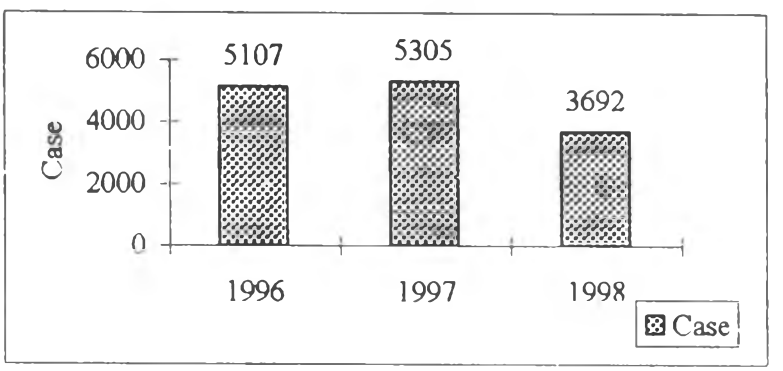
Figure 4.8 Number of Invalidity Workman's Compensation Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

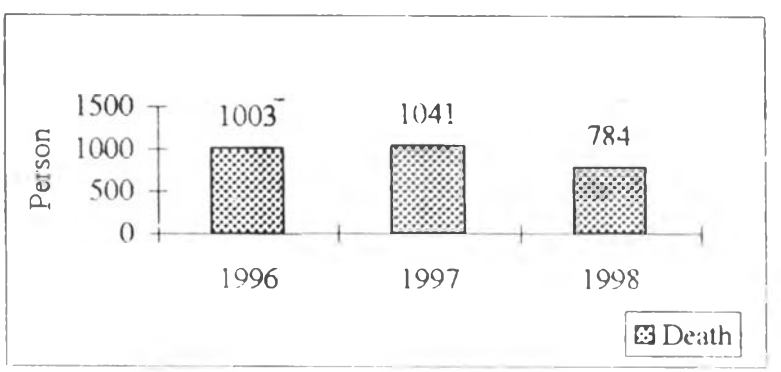
Figure 4.9 Partially loss of organs Workman's Compensation Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

Figure 4.10 Number of Death Workman's Compensation Scheme



Sources : SSO, 1997 Annual Report

SSO, 1998 Annual Report Unpublished

4.6 Varity of Health Insurance Schemes in Thailand

Health insurance schemes differ due to their sources of fund, benefits, packages payment mechanisms and regulations (Table 4.19). Therefore benefits that under cover population receive is highly different (Table 4.20). Some groups are discriminated more and about 20 percent of population have no insurance coverage.

Table 4.19 Benefits of Insurance Packages in Thailand

INSURNCE PROGRAM	AMBULA-TORY	INPATIENT	PROVIDR CHOICE	CASH BENEFIT	INCLUSIVE CONDITION	MATER-NITY	ANNUAL EXAM	PREVNTN PROMOTN	SERVICE NOT COVRD
CSMBS	Public Only	Public & Private	Free	No	All	Yes	Yes	Yes	Special RN
SSS	Public & Private	Public & Private	Contract Hosp/Net-Work	Yes	Non-work related ill-ness	No	No	Hlth Educ. Immunizn	Pvt. Bed Special RN
WCS	Public & Private	Public & Private	Free	Yes	Work related Illness/injury	No	No	No	None
VHCS	Public	Public	Requires Referral	No	All	Yes	Possible	Possible	Pvt. Bed
LICS	Public	Public	Requires Referral	No	All	Yes	No	Limited	Special RN Pvt. Bed
PRIVATE	Public & Private	Public & Private	Free	Usually No	According to Contract	Varies	Varies	Varies	Varies

Sources : Pannarunothai, S. and Tangcharoensathien, V. (1993). Supachutikul, A. (1996)

Table 4.20 Source of Funds, Insurance Payment Mechanism, and Utilization of Services, Thailand, 1996

INSURNCE PROGRAM	PAYMENT MECHANSM	COPAYMT	AVE EXP/ CAP/YR	OP VISITS/ CAPITA	ADMISSN PER 100	ALOS * (days)	SOURCE OF CARE
CSMBS	Fee-for-Service	IP at Private Hospital	>1781	5.5	13.6	11.9 5.1	Public Private
SSS	Capitation	Maternity, Emergency	712	1.4	2.6	5.6 4.0	Public private
WCS	Fee-for-Service	If over B30,000 ceiling	96	0.04	0.6	7.0	
VHCS	Capitation	None	~190	1.7	5.8	4.3	
LICS	Global Budget	None	<225	0.7	3	5.1	
PRIVATE	Fee-for-Service	Almost None	1667	n.a.	n.a.	n.a.	
OVERALL POP. RATE	Multiple		n.a.	2	5 to 6	n.a.	

Sources : Supachutikul, A. Gilson, L., and Tangcharoensatien (no date) Supachutikul, A. (Jul 1996)

(*) from Songkhla, et.al. (June 28, 1997)