

## **Chapter 4**

### **Empirical Results**

From the theoretical treatment of non-life insurance and research methodology that we stated earlier, in this chapter we will analyze the effect of the insurance business on the balance of payments by using the Department of Insurance Records. The key findings of this study are as follows:

#### **4.1 The Effect of the Insurance Business on the Balance of Payments**

The Non-life insurance business in Thailand has expanded rapidly. In 1990, total premiums received directly of non-life insurance business amounted to Baht 17,097.37 million, increasing to Baht 44,423.82 million in 1994. (see table 4.1) The average annual growth rate of the direct premiums has been about 22 per cent. Of this total, the premiums for reinsurance ceded to abroad has been increasing from Baht 4,679.61 million in 1990 to Baht 9,119.94 million in 1994, an increase of Baht 4,440.33 million or 49 per cent.

The results of treatment of non-life insurance in the balance of payments from 1990-1994 (table 4.2-4.6) show the deficit in Insurance Balance of Payments every years. That means the total outflows more than the total inflows through our country. The Outflows are in the form of premiums for reinsurance ceded and retrocession premiums, losses paid to reinsurance assumed, commissions or brokerages paid to reinsurance assumed from abroad and the profit pay back to foreign parents companies.

The Inflows are in the form of premiums from reinsurance assumed, losses recovery from reinsurance ceded and losses recovery from retrocession, commissions or brokerages recovery from reinsurance and retrocession ceded (excluded Direct Insurance and Local Reinsurance).

From table 4.7, the deficit in insurance balance of payments has been rapidly increasing from Baht 2,442.64 million in 1990 to Baht 7,252.37 million in 1994, up Baht 4,809.73 million. In 1994, reinsurance business have currencies outflow amounted to Baht 13,720.41 million, an increase over the Baht 6,453.34 million of 1990. Of this total, Baht 3,861.94 million was from fire insurance, up 15 per cent on the previous year; Baht 546.73 million from automobile, up 18 per cent; Baht 3,792.07 million from miscellaneous, up 40 per cent; Baht 208.26 million from hull, up 25 per cent; Baht 1,018.04 million from cargo, up 27 per cent. The highest deficit was miscellaneous about 1,361.13 million, followed by fire and cargo.

There is a noticeable case in 1992 which the deficit is very small comparing the other years. This is a result of the high risks in reinsurance ceded of Thailand that induce the high losses incurred back to our country.

From the mentioned above, Thailand has always deficit of insurance services because there is high in Outward reinsurance. Moreover there are laws and regulated to force the insurance companies in Thailand that they can receive the Direct Premiums about 10 % of the equity of their companies in each case. Therefore the rest of the premiums have to reinsurance both in domestic and abroad but mainly emphasize in abroad.

Considering the lines of business which divided into Fire, Automobile, Miscellaneous, Hull and Cargo (table 4.8 - 4.12). We can see that fire insurance had the highest deficit about 560.44 million baht in 1990, followed by miscellaneous and cargo insurance. In 1991 fire insurance had still the highest deficit about 760.73 million baht, followed by miscellaneous and automobile insurance. In 1992 fire insurance had the highest deficit about 821.36 million baht. In 1993 and 1994 the highest deficit was miscellaneous insurance about 1175.42 and 1361.13 million baht respectively, followed by fire and cargo. Chart 3 shows the change in deficit of insurance services which classified by lines of business.

The fire insurance deficit has been increasing from Baht 560.44 million in 1990 to Baht 842.88 million in 1994. The automobile insurance deficit increased from Baht 13.36 million in 1990 to Baht 166.80 million in 1994. In 1994, total miscellaneous insurance deficit, amounted to Baht 1,361.13 million, an increase from Baht 241.03 million in 1990. Next was hull insurance deficit which amounted to Baht 156.98 million in 1994, an increase from Baht 79.22 million in 1990. Cargo insurance deficit increased from Baht 180.74 million in 1990 to Baht 431.21 million in 1994.

Considering the insurance services, table 4.13 shows the deficit in insurance services in 1990-1994. The insurance services deficit amounted to Baht 5,350.31 million, an increase over the Baht 2,584.07 million of 1990. The average annual growth rate of insurance services deficit has been about 26 per cent, except in 1992 which was about 3 per cent.

From table 4.14, commissions had enjoyed a yearly surplus of about Baht 2,397.27 million in 1994, an increase over the Baht 1,559.05 million of 1990. The average annual growth rate of commissions surplus has been about 11 per cent.

Like commissions, claims has been a surplus of about Baht 1,925.55 million in 1990, up to Baht 3,429.02 million in 1994. A surplus in net

commissions and claims has always been a major factor in decreasing the current account deficit. (table 4.15)

The deficit in Income which divided into life and non-life insurance rose sharply from Baht 1,526.28 million in 1990 to Baht 4,293.38 million in 1994. (table 4.16) Considering life insurance business, we can see that life insurance had more currencies outflow of income than non-life insurance. This is because of the high profit remittance of A.I.A. company. The high profit pay back to A.I.A.'s parent company is the major factor in insurance balance of payments deficit.

Table 4.17 shows premiums from reinsurance assumed from abroad and premiums for reinsurance ceded to abroad.

In 1991, premiums from reinsurance assumed from abroad totalled Baht 387.29 million, up 38.99 per cent from prior year. Premiums for reinsurance ceded to abroad was Baht 5,840.72 million, up 24.81 per cent from prior year. Compared with 1994, premiums from reinsurance assumed from abroad totalled Baht 334.66 million, down 15.89 per cent from prior year. Premiums for reinsurance ceded to abroad was Baht 9,119.94 million, up 27.36 per cent from prior year.

From the mentioned above, we can conclude that premiums from reinsurance assumed from abroad tend to downward during the past five year (1990-1994). Unlike premiums for reinsurance ceded to abroad, which tend to increase. The increasing in premiums for reinsurance ceded has led to a rise in the trade in insurance services deficit. If the premiums for reinsurance ceded to abroad has still upward trend in the future, the trade in insurance deficit is expected to grow.

Table 4.18 shows reinsurance ceded ratio compared with direct premiums and insurance services ratio compared with premiums for reinsurance ceded to abroad.

In 1990 underwriting of non-life insurance business showed 17,097.37 million baht in direct premiums. They transferred some parts of their risks to foreign reinsurers, total premiums ceded to abroad amounting to 4,679.61 million baht or 27.37 per cent of direct premiums. Total insurance services was 2,723.59 million baht or 58.20 per cent of premiums for reinsurance ceded to abroad.

In 1994 underwriting of non-life insurance business showed 44,423.82 million baht in direct premiums. They transferred some parts of their risks to foreign reinsurers, total premiums ceded to abroad amounting to 9,119.94 million baht or 20.53 per cent of direct premiums. Total insurance services

was 5,485.68 million baht or 60.15 per cent of premiums for reinsurance ceded to abroad.

Although, reinsurance ceded ratio showed sign of surging, the total of the premiums for reinsurance ceded to abroad has still increased. From these data, we can calculate the average ratio of reinsurance ceded to abroad and insurance services which are 24.26 per cent and 58.40 per cent. These average ratio use to forecast the change of premiums for reinsurance ceded to abroad and insurance services whenever the direct premiums changes. We assumed that the average annual growth rate of direct premiums has been about 20 per cent. The direct premiums is expected to grow from Baht 44,423.83 million in 1994 to Baht 132,648.84 million in 2000. Premiums for reinsurance ceded to abroad will increase from Baht 9,119.94 million in 1994 to Baht 32,180.61 million in 2000.

Moreover, we can forecast the change in premiums for reinsurance ceded to abroad and insurance services of fire, automobile, miscellaneous, hull and cargo by using the average ratio of reinsurance ceded to abroad and insurance services of each lines of business. (table 4.19-4.23)

For fire insurance, the average annual growth rate of direct premiums has been about 14 per cent. The average insurance ratio was 67.19 per cent. The average reinsurance ceded ratio has been about 53.27 per cent. It is estimated that in 2000 the direct premiums will have grown a further Baht 16,136.34 million. Premiums for reinsurance ceded to abroad will increase from Baht 3,642.04 million in 1994 to Baht 8,595.83 million in 2000.

For automobile insurance, the average annual growth rate of direct premiums has been about 33 per cent. The average insurance ratio was 46.76 per cent. The average reinsurance ceded ratio has been about 2.53 per cent, this ratio shows the less of the automobile outward reinsurance. It is estimated that in 2000 the direct premiums will have grown a further Baht 156,141.30 million. Premiums for reinsurance ceded to abroad will increase from Baht 541.16 million in 1994 to Baht 3,950.37 million in 2000. We can notice that automobile insurance have a lion share of premiums, resulting from the sharp increase in the number of cars.

For miscellaneous insurance, the average annual growth rate of direct premiums has been about 31 per cent. The average insurance ratio was 50.76 per cent. The average reinsurance ceded ratio has been about 54.09 per cent. It is estimated that in 2000 the direct premiums will have grown a further Baht 34,077.47 million. Premiums for reinsurance ceded to abroad will increase from Baht 3,755.35 million in 1994 to Baht 18,432.50 million in 2000.

For hull insurance, the average annual growth rate of direct premiums has been about 24 per cent. The average insurance ratio was 59.21 per cent. The average reinsurance ceded ratio has been about 69.77 per cent. It is estimated that in 2000 the direct premiums will have grown a further Baht 995.94 million. Premiums for reinsurance ceded to abroad will increase from Baht 205.10 million in 1994 to Baht 694.87 million in 2000.

For cargo insurance, the average annual growth rate of direct premiums has been about 13 per cent. The average insurance ratio was 47.64 per cent. The average reinsurance ceded ratio has been about 50.18 per cent. It is estimated that in 2000 the direct premiums will have grown a further Baht 3,841.72 million. Premiums for reinsurance ceded to abroad will increase from Baht 976.30 million in 1994 to Baht 1,927.78 million in 2000.

We can conclude that non-life insurance is becoming more popular, particularly automobile insurance, followed by miscellaneous insurance and fire insurance. Direct automobile and fire insurance premiums together account for 80 per cent of total and are increasing, particularly in the case of the public are using motor vehicles much more. Miscellaneous, hull and cargo insurance are also rising. This presents a brilliant chance for growth in the insurance business.

Table 4.1 : Direct Premiums in 1990-1994

	Million of Baht				
	1990	1991	1992	1993	1994
Direct Premiums	17,097.32	20,341.94	25,144.18	35,946.42	44,423.82
Premiums for reinsurance ceded to abroad	4,679.61	5,840.72	6,222.71	7,160.82	9,119.94

Source : Department of Insurance

Table 4.2 : Insurance Balance of Payments in 1990

Unit : 1,000 Baht

Balance of Payment 1990	Reinsurance Inflow						Reinsurance Outflow						Net					
	Fire	Automobile	Miscellaneous	Hull	Cargo	Total	Fire	Automobile	Miscellaneous	Hull*	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total
<b>1. Current Account</b>																		
1.1 Trade																		
1.2 Service																		
-Insurance services <sup>1</sup>	105,753	8,302	12,145	3,955	9,381	139,516	1,733,275	83,893	529,800	35,244	341,777	2,723,589	-1,627,522	-75,391	-517,455	-31,289	-332,416	-2,584,073
-Commissions	1,143,030	69,834	283,333	8,393	162,975	1,667,365	75,955	7,602	6,906	6,556	11,300	108,319	1,067,075	62,032	276,427	1,837	151,875	1,559,048
1.3 Income																		
-Life Insurance												1,161,530						-1,161,530
-Non-life Insurance												364,747						-364,747
1.4 Transfer																		
-Net premiums <sup>2</sup>	69,187	12,059	14,692	15,495	27,706	139,139	827,036	177,106	705,977	46,718	199,183	1,956,020	-757,849	-165,047	-691,285	-31,223	-171,477	-1,816,881
-Claims	827,036	177,106	705,977	155,383	199,183	2,064,685	89,187	12,059	14,692	15,495	27,706	139,139	757,849	165,047	691,285	139,888	171,477	1,925,546
						<u>4,010,705</u>						<u>6,453,344</u>						<u>-2,442,639</u>
<b>2. Capital Account</b>																		
2.1 Portfolio Investment																		
2.2 Direct Investment																		
2.3 Other Investment																		
2.4 Reserve																		

<sup>1</sup> Insurance services = premiums - claims<sup>2</sup> Net premiums = premiums - insurance services

\* Insurance services = premiums - service ratio (43%)

Table 4.3 : Insurance Balance of Payments in 1991

Unit : 1,000 Baht

Balance of Payment 1991	Reinsurance Inflow						Reinsurance Outflow						Net					
	Fire	Automobile	Miscellaneous	Hull*	Cargo	Total	Fire	Automobile	Miscellaneous	Hull*	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total
<b>1. Current Account</b>																		
1.1 Trade																		
1.2 Service																		
-Insurance services	183,168	6,877	11,716	915	16,355	219,031	2,041,155	170,743	1,006,027	48,095	137,872	3,403,892	-1,857,987	-163,866	-994,311	-47,160	-121,517	-3,184,861
-Commissions	1,212,652	103,129	359,578	10,422	194,062	1,879,843	115,400	7,513	6,525	589	12,518	142,545	1,097,252	95,616	353,053	9,833	181,544	1,737,298
1.3 Income																		
-Life Insurance												1,238,674						-1,238,674
-Non-life Insurance												372,131						-372,131
1.4 Transfer																		
-Net premiums	93,398	13,072	30,395	1,212	30,186	168,261	833,572	208,578	838,303	63,753	491,950	2,436,156	-740,176	-195,506	-807,908	-62,541	-461,764	-2,267,895
-Claims	833,572	208,578	838,303	236,663	491,950	2,809,068	93,398	13,072	30,395	2,327	30,186	169,376	740,176	195,506	807,908	234,338	461,764	2,439,690
						<u>4,876,201</u>						<u>7,762,774</u>						<u>-2,886,573</u>
<b>2. Capital Account</b>																		
2.1 Portfolio Investment																		
2.2 Direct Investment																		
2.3 Other Investment																		
2.4 Reserve																		

\* Insurance services = premiums · service ratio (43%)



Table 4.4 : Insurance Balance of Payments in 1992

Unit : 1,000 Baht

Balance of Payment 1992	Reinsurance Inflow						Reinsurance Outflow						Net					
	Fire	Automobile	Miscellaneous	Hull*	Cargo	Total	Fire	Automobile	Miscellaneous*	Hull	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total
<b>1. Current Account</b>																		
1.1 Trade																		
1.2 Service																		
-Insurance services	148,641	5,323	14,268	1,772	20,178	191,182	2,110,639	137,775	949,247	39,876	220,458	3,457,995	-1,960,998	-132,452	-934,979	-38,104	-200,280	-3,266,813
-Commissions	1,259,412	84,902	421,528	11,461	185,398	1,962,699	119,777	7,142	19,482	998	15,123	162,522	1,139,635	77,760	402,044	10,483	170,275	1,800,177
1.3 Income																		
-Life Insurance																		
-Non-life Insurance																		
1.4 Transfer																		
-Net premiums	131,483	13,824	47,197	2,350	36,333	231,187	781,314	191,496	1,258,305	82,367	449,807	2,763,289	-649,831	-177,672	-1,211,108	-80,017	-413,474	-2,532,102
-Claims	781,314	191,496	2,705,513	82,367	449,807	4,210,497	131,483	13,824	47,197	4,248	36,333	233,085	649,831	177,672	2,658,318	78,119	413,474	3,977,412
						<u>6,595,565</u>						<u>8,805,446</u>						<u>-2,209,881</u>
<b>2. Capital Account</b>																		
2.1 Portfolio Investment																		
2.2 Direct Investment																		
2.3 Other Investment																		
2.4 Reserve																		

\* Insurance services = premiums • service ratio (43%)

Table 4.5 : Insurance Balance of Payments in 1993

Unit : 1,000 Baht

Balance of Payment 1993	Reinsurance Inflow						Reinsurance Outflow						Net					
	Fire	Automobile*	Miscellaneous	Hull*	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total
<b>1. Current Account</b>																		
1.1 Trade																		
1.2 Service																		
-Insurance services	163,964	5,492	14,412	1,361	16,864	202,113	1,831,596	264,303	1,650,751	148,129	390,303	4,285,082	-1,667,612	-258,811	-1,636,339	-146,768	-373,439	-4,082,969
-Commissions	1,310,808	112,832	468,321	15,002	205,166	2,111,929	108,839	4,664	7,408	655	7,839	129,403	1,201,769	108,168	460,915	14,347	197,327	1,982,526
1.3 Income																		
-Life Insurance																		-2,146,195
-Non-life Insurance																		-889,318
1.4 Transfer																		
-Net premiums	134,809	7,279	22,947	1,805	28,946	195,786	1,285,805	178,174	1,026,597	10,433	374,728	2,875,737	-1,150,998	-170,895	-1,003,650	-8,628	-345,782	-2,679,951
-Claims	1,285,805	178,174	1,026,597	10,433	374,728	2,875,737	134,809	14,792	22,947	7,378	28,946	208,872	1,150,998	163,382	1,003,650	3,055	345,782	2,668,865
						<u>5,385,565</u>												<u>-5,149,042</u>
<b>2. Capital Account</b>																		
2.1 Portfolio Investment																		
2.2 Direct Investment																		
2.3 Other Investment																		
2.4 Reserve																		

\* Insurance services = premiums - service ratio (43%)

Table 4.6 : Insurance Balance of Payments in 1994

Unit : 1,000 Baht

Balance of Payment 1994	Reinsurance Inflow						Reinsurance Outflow						Net					
	Fire	Automobile*	Miscellaneous	Hull*	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total	Fire	Automobile	Miscellaneous	Hull	Cargo	Total
<b>1. Current Account</b>																		
1.1 Trade																		
1.2 Service																		
-Insurance services	127,190	387	6,552	1,150	86	135,365	2,387,793	298,265	1,951,444	172,279	875,898	5,485,677	-2,280,603	-297,878	-1,944,892	-171,129	-875,810	-5,350,312
-Commissions	1,506,838	136,138	588,657	15,784	251,691	2,499,108	89,114	366	4,898	370	7,089	101,837	1,417,724	135,772	583,759	15,414	244,602	2,397,271
1.3 Income																		
-Life Insurance												3,240,337						-3,240,337
-Non-life Insurance												1,053,039						-1,053,039
1.4 Transfer																		
-Net premiums	130,782	512	31,825	1,525	34,655	199,299	1,254,247	242,891	1,803,904	32,825	300,400	3,634,267	-1,123,465	-242,379	-1,772,079	-31,300	-265,745	-3,434,968
-Claims	1,254,247	242,891	1,803,904	32,825	300,400	3,634,267	130,782	5,203	31,825	2,783	34,655	205,248	1,123,465	237,888	1,772,079	30,042	265,745	3,429,019
						<u>6,468,039</u>						<u>13,720,405</u>						<u>-7,252,368</u>
<b>2. Capital Account</b>																		
2.1 Portfolio Investment																		
2.2 Direct Investment																		
2.3 Other Investment																		
2.4 Reserve																		

\* Insurance services = premiums - service ratio (43%)

Table 4.7 Insurance Balance of Payments in 1990 - 1994

Million of Baht					
Items	1990	1991	1992	1993	1994
<b>1. Reinsurance Inflow</b>					
- Insurance services	139.52	219.03	191.18	202.11	135.37
- Claims recovery from reinsurance ceded to abroad	2,064.69	2,609.07	4,210.50	2,875.74	3,634.27
- Commissions recovery from reinsurance ceded to abroad	1,667.37	1,879.84	1,962.70	2,111.93	2,499.11
- Net premiums	139.14	168.26	231.19	195.79	199.30
<b>Total</b>	<b>4,010.72</b>	<b>4,876.20</b>	<b>6,595.57</b>	<b>5,385.57</b>	<b>6,468.05</b>
<b>2. Reinsurance Outflow</b>					
- Insurance services	2,723.59	3,403.89	3,458.00	4,285.08	5,485.68
- Claims paid to reinsurance assumed from abroad	139.14	169.38	233.09	208.87	205.25
- Commissions paid to reinsurance assumed from abroad	108.32	142.55	162.52	129.40	101.84
- Net premiums	1,956.02	2,436.16	2,763.29	2,875.74	3,634.27
- Income (profit remittance)	1,526.28	1,610.80	2,188.55	3,035.51	4,293.38
<b>Total</b>	<b>6,453.35</b>	<b>7,762.78</b>	<b>8,805.45</b>	<b>10,534.60</b>	<b>13,720.42</b>
<b>Insurance Balance of Payments</b>	<b>-2,442.63</b>	<b>-2,886.58</b>	<b>-2,209.88</b>	<b>-5,149.03</b>	<b>-7,252.37</b>

Table 4.8: Non-life Insurance Balance of Payments in 1990(classified by lines of business)

Million of Baht					
	Fire	Automobile	Miscellaneous	Hull	Cargo
Inflow	2,145.01	267.10	1,016.15	183.23	399.23
Outflow	2,705.45	280.46	1,257.18	104.01	579.97
Net	-560.44	-13.36	-241.03	79.22	-180.74

Table 4.9: Non-life Insurance Balance of Payments in 1991(classified by lines of business)

Million of Baht					
	Fire	Automobile	Miscellaneous	Hull	Cargo
Inflow	2,322.79	331.66	1,239.99	249.21	732.55
Outflow	3,083.52	399.91	1,881.25	114.76	672.53
Net	-760.73	-68.25	-641.26	134.45	60.02

Table 4.10: Non-life Insurance Balance of Payments in 1992(classified by lines of business)

Million of Baht					
	Fire	Automobile	Miscellaneous	Hull	Cargo
Inflow	2,321.85	295.55	3,188.50	97.95	691.72
Outflow	3,143.21	350.24	2,274.23	127.49	721.72
Net	-821.36	-54.69	914.27	-29.54	-30.00

Table 4.11: Non-life Insurance Balance of Payments in 1993(classified by lines of business)

Million of Baht					
	Fire	Automobile	Miscellaneous	Hull	Cargo
Inflow	2,895.21	303.78	1,532.28	28.60	625.70
Outflow	3,361.05	461.93	2,707.70	166.60	801.82
Net	-465.84	-158.15	-1,175.42	-138.00	-176.12

Table 4.12: Non-life Insurance Balance of Payments in 1994(classified by lines of business)

Million of Baht					
	Fire	Automobile	Miscellaneous	Hull	Cargo
Inflow	3,019.06	379.93	2,430.94	51.28	586.83
Outflow	3,861.94	546.73	3,792.07	208.26	1,018.04
Net	-842.88	-166.80	-1,361.13	-156.98	-431.21

**Chart1 : The Current Account Deficit of Insurance services in 1990-1994  
(classified by lines of business)**

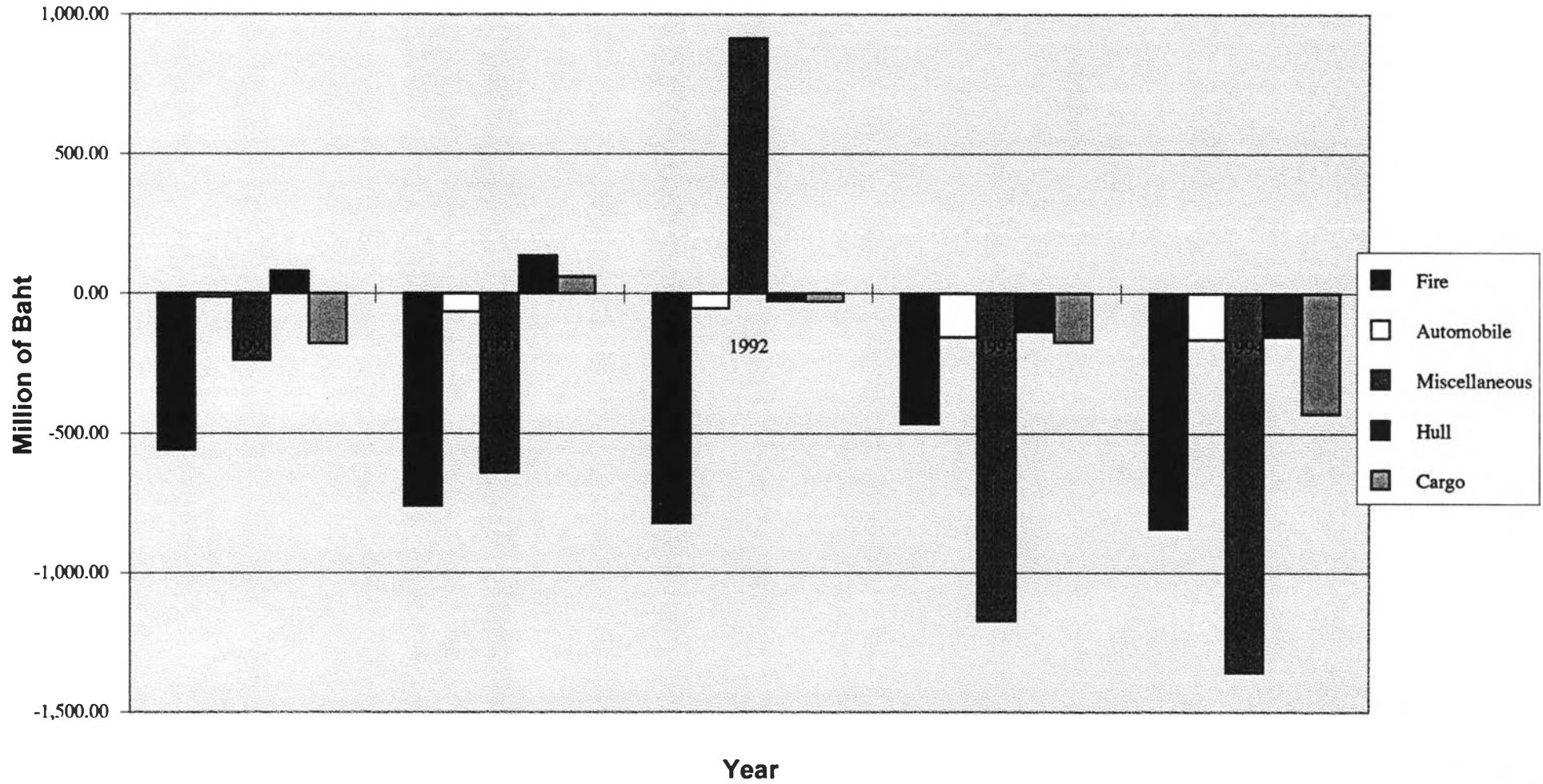


Table 4.13 : Insurance services in 1990-1994

	Million of Baht		
	<b>Reinsurance Inflow</b>	<b>Reinsurance Outflow</b>	<b>Net</b>
<b>1990</b>	139,516	2,723,589	-2,584,073
<b>1991</b>	219,031	3,403,892	-3,184,861
<b>1992</b>	191,182	3,457,995	-3,266,813
<b>1993</b>	202,113	4,285,082	-4,082,969
<b>1994</b>	135,365	5,485,677	-5,350,312

Source : Department of Insurance

Table 4.14 : Commissions in 1990-1994

	Million of Baht		
	<b>Reinsurance Inflow</b>	<b>Reinsurance Outflow</b>	<b>Net</b>
<b>1990</b>	1,667.37	108.32	1,559.05
<b>1991</b>	1,879.84	142.55	1,737.29
<b>1992</b>	1,962.70	162.52	1,800.18
<b>1993</b>	2,111.93	129.40	1,982.53
<b>1994</b>	2,499.11	101.84	2,397.27

Source : Department of Insurance

Table 4.15 : Claims in 1990-1994

	Million of Baht		
	<b>Reinsurance Inflow</b>	<b>Reinsurance Outflow</b>	<b>Net</b>
<b>1990</b>	2,064.69	139.14	1,925.55
<b>1991</b>	2,609.07	169.38	2,439.69
<b>1992</b>	4,210.50	233.09	3,977.41
<b>1993</b>	2,875.74	208.87	2,666.87
<b>1994</b>	3,634.27	205.25	3,429.02

Source : Department of Insurance

Table 4.16 : Income in 1990-1994

	Reinsurance Outflow		Million of Baht
	<b>Life insurance</b>	<b>Non-life insurance</b>	<b>Net</b>
<b>1990</b>	-1,161.53	-364.75	-1,526.28
<b>1991</b>	-1,238.67	-372.13	-1,610.80
<b>1992</b>	-1,560.87	-627.68	-2,188.55
<b>1993</b>	-2,146.20	-889.32	-3,035.52
<b>1994</b>	-3,240.34	-1,053.04	-4,293.38

Source : Department of Insurance



Table 4.17 : Non-life Reinsurance Premiums in 1990-1994

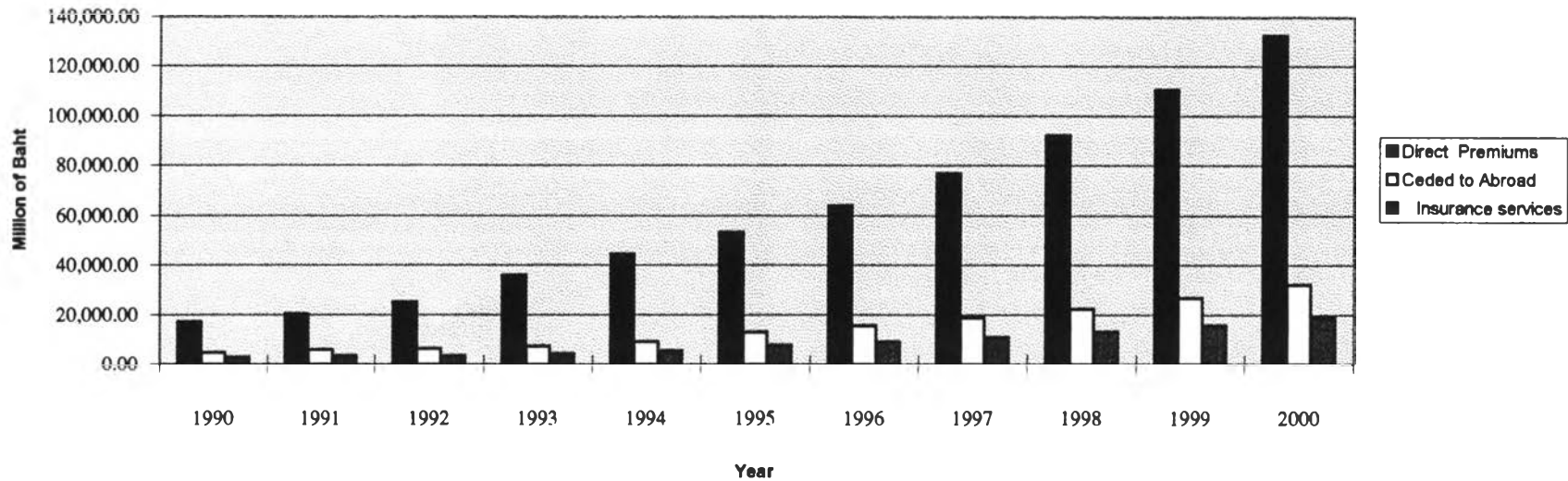
	Million of Baht				
<b>Premiums</b>	1990	1991	1992	1993	1994
<u>Premiums from Reinsurance Assumed from abroad</u>					
Total	278.66	387.29	422.37	397.9	334.66
Increase (Decrease) from the prior year					
Amount		108.64	35.08	(24.47)	(63.24)
%		38.99	9.06	(5.79)	(15.89)
<u>Premiums for Reinsurance Ceded to abroad</u>					
Total	4,679.61	5,840.72	6,222.71	7,160.82	9,119.94
Increase (Decrease) from the prior year					
Amount		1,161.11	381.99	938.11	1,959.13
%		24.81	6.54	15.08	27.36

**Table 4.18 : Non-Life Insurance Premiums ( All Lines of Business)**

Million of Baht

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Direct Premiums	17,079.37	20,341.94	25,144.18	35,946.44	44,423.83	53,308.60	63,970.32	76,764.38	92,117.25	110,540.70	132,648.84
Premiums for Reinsurance Ceded to Abroad	4,679.61	5,840.72	6,222.71	7,160.82	9,119.94	12,932.67	15,519.20	18,623.04	22,347.64	26,817.17	32,180.61
Reinsurance Ceded Ratio(%)	27.37	28.71	24.75	19.92	20.53	24.26	24.26	24.26	24.26	24.26	24.26
<u>Reinsurance outflow</u> Insurance services	2,723.59	3,403.89	3,458.00	4,285.08	5,485.68	7,553.97	9,064.76	10,877.72	13,053.26	15,663.91	18,796.69
Insurance service Ratio (%)	58.20	58.28	55.57	59.84	60.15	58.41	58.41	58.41	58.41	58.41	58.41

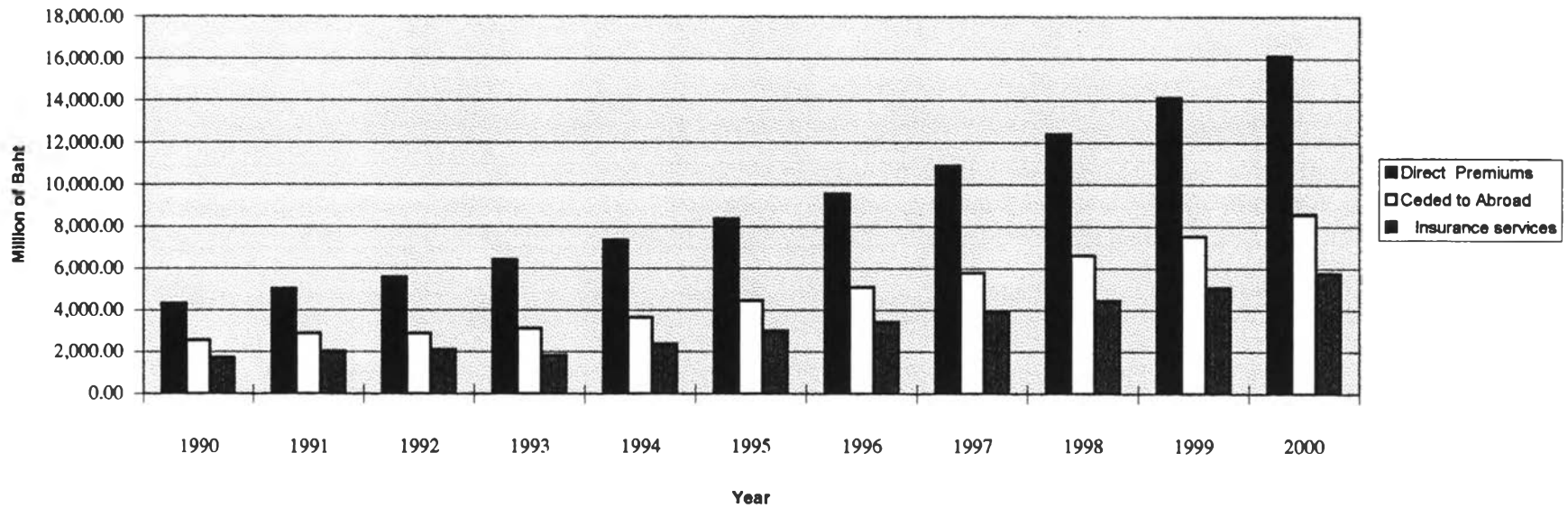
**Chart 2 : Non-Life Insurance Premiums (All Lines of Business)**



**Table 4.19 : Fire Insurance Premiums (Forecast)**

	Million of Baht										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Direct Premiums	4,308.75	5,038.99	5,592.44	6,408.80	7,351.50	8,380.71	9,554.01	10,891.57	12,416.39	14,154.68	16,136.34
Premiums for Reinsurance Ceded to Abroad	2,560.31	2,874.73	2,891.95	3,117.40	3,642.04	4,464.40	5,089.42	5,801.94	6,614.21	7,540.20	8,595.83
Reinsurance Ceded Ratio(%)	59.42	57.05	51.71	48.64	49.54	53.27	53.27	53.27	53.27	53.27	53.27
Reinsurance outflow Insurance services	1,733.28	2,041.16	2,110.64	1,831.60	2,387.79	2,999.63	3,419.58	3,898.32	4,444.09	5,066.26	5,775.54
Insurance service Ratio (%)	67.70	71.00	72.98	58.75	65.56	67.19	67.19	67.19	67.19	67.19	67.19

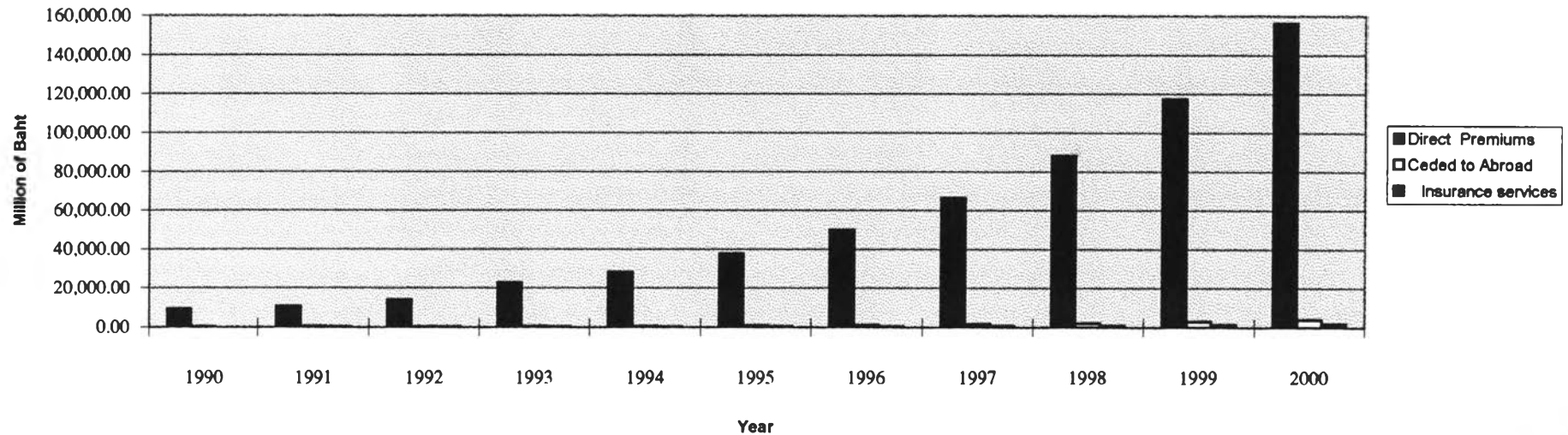
**Chart 3 : Fire Insurance Premiums (Forecast)**



**Table 4.20 : Automobile Insurance Premiums (Forecast)**

	Million of Baht										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Direct Premiums	9,275.21	10,585.49	13,869.28	22,680.10	28,210.32	37,519.73	49,901.23	66,368.64	88,270.29	117,399.48	156,141.30
Premiums for Reinsurance Ceded to Abroad	260.80	379.32	329.27	442.48	541.16	949.25	1,262.50	1,679.13	2,233.24	2,970.21	3,950.37
Reinsurance Ceded Ratio(%)	2.83	3.58	2.37	1.95	1.92	2.53	2.53	2.53	2.53	2.53	2.53
<u>Reinsurance outflow</u>											
Insurance services	83.69	170.74	137.78	264.30	298.27	443.87	590.35	785.16	1,044.26	1,388.87	1,847.20
Insurance service Ratio (%)	32.09	45.01	41.84	59.73	55.12	46.76	46.76	46.76	46.76	46.76	46.76

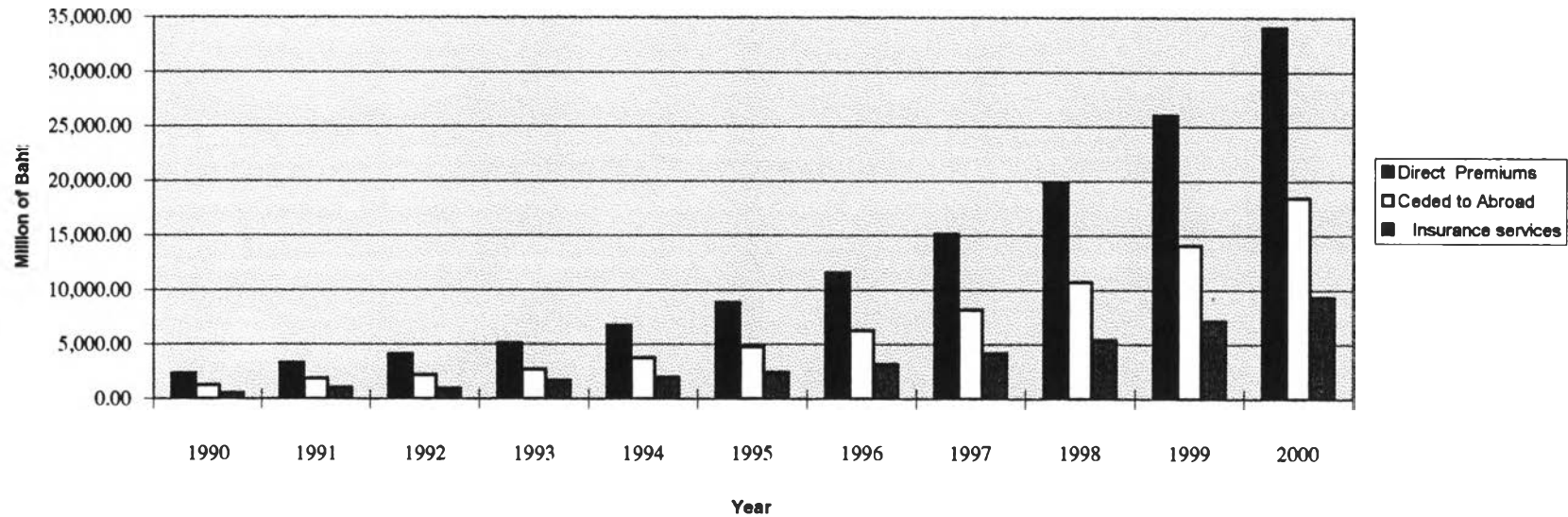
**Chart 4 : Automobile Insurance Premiums (Forecast)**



**Table 4.21 : Miscellaneous Insurance Premiums (Forecast)**

	Million of Baht										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Direct Premiums	2,324.65	3,301.34	4,134.77	5,112.17	6,742.79	8,833.05	11,571.30	15,158.40	19,857.51	26,013.34	34,077.47
Premiums for Reinsurance Ceded to Abroad	1,235.58	1,844.33	2,207.55	2,677.35	3,755.35	4,777.80	6,258.92	8,199.18	10,740.93	14,070.62	18,432.50
Reinsurance Ceded Ratio(%)	53.15	55.87	53.39	52.37	55.69	54.09	54.09	54.09	54.09	54.09	54.09
Reinsurance outflow Insurance services	526.60	1,006.03	949.25	1,650.75	1,951.44	2,425.21	3,177.03	4,161.90	5,452.09	7,142.24	9,356.34
Insurance service Ratio (%)	42.62	54.55	43.00	61.66	51.96	50.76	50.76	50.76	50.76	50.76	50.76

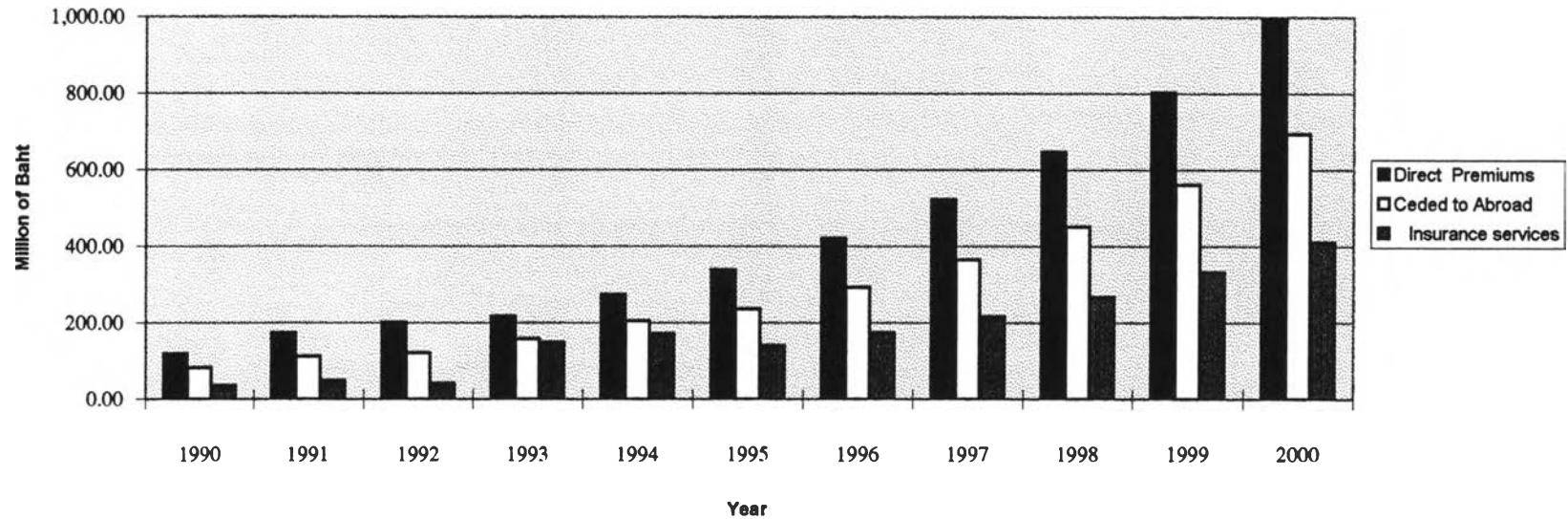
**Chart 5 : Miscellaneous Insurance Premiums (Forecast)**



**Table 4.22 : Hull Insurance Premiums (Forecast)**

	Million of Baht										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Direct Premiums	118.35	174.18	201.98	217.23	273.97	339.72	421.26	522.36	647.72	803.18	995.94
Premiums for Reinsurance Ceded to Abroad	81.96	111.85	122.24	158.56	205.10	237.02	293.91	364.45	451.91	560.38	694.87
Reinsurance Ceded Ratio(%)	69.25	64.22	60.52	79.99	74.86	69.77	69.77	69.77	69.77	69.77	69.77
<u>Reinsurance outflow</u>											
Insurance services	35.24	48.10	39.88	148.13	172.28	140.34	174.03	215.79	267.58	331.80	411.43
Insurance service Ratio (%)	43.00	43.00	32.62	93.42	59.21	59.21	59.21	59.21	59.21	59.21	59.21

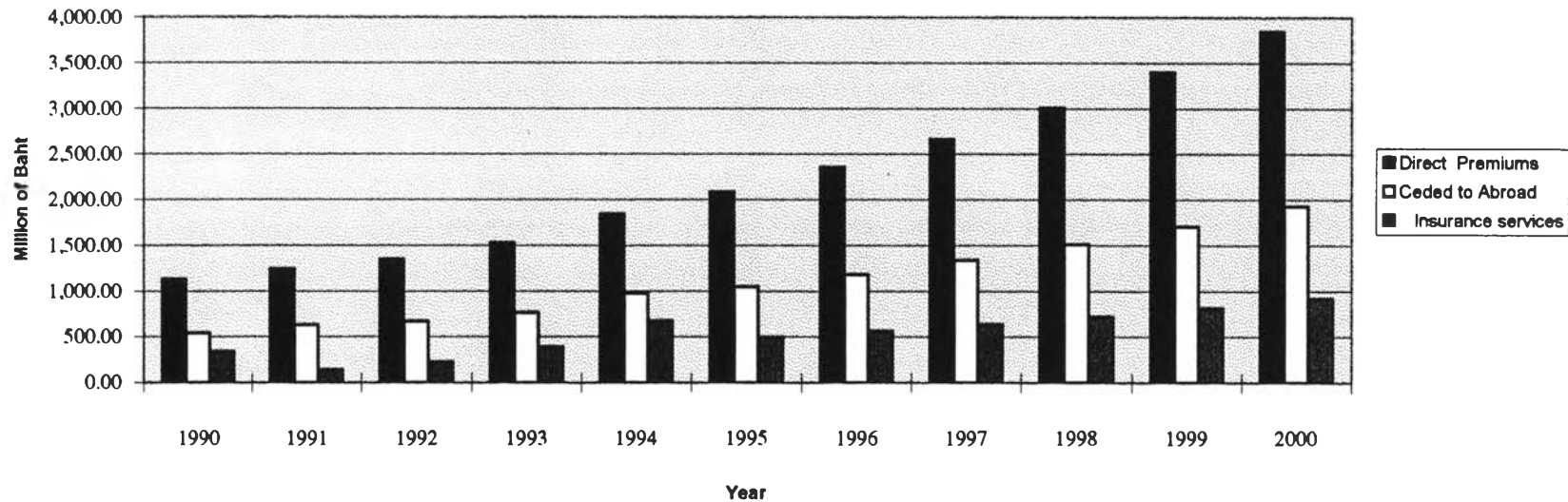
**Chart 6 : Hull Insurance PremiLums (Forecast)**



**Table 4.23 : Cargo Insurance Premiums (Forecast)**

	Million of Baht										
	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Direct Premiums	1,128.40	1,241.95	1,345.70	1,528.12	1,845.25	2,085.13	2,356.20	2,662.51	3,008.63	3,399.75	3,841.72
Premiums for Reinsurance Ceded to Abroad	540.96	629.82	670.27	765.03	976.30	1,046.32	1,182.34	1,336.05	1,509.73	1,705.99	1,927.78
Reinsurance Ceded Ratio(%)	47.94	50.17	49.81	50.06	52.91	50.18	50.18	50.18	50.18	50.18	50.18
<u>Reinsurance outflow</u>											
Insurance services	341.78	137.87	220.46	390.30	675.90	498.47	563.27	636.49	719.24	812.74	918.39
Insurance service Ratio (%)	63.18	21.89	32.89	51.02	69.23	47.64	47.64	47.64	47.64	47.64	47.64

**Chart 7 : Cargo Insurance Premiums (Forecast)**



## **4.2 Comparing the result of the Insurance Balance of Payments between Department of Insurance and the Bank of Thailand**

Comparing the data between the Department of Insurance and the Foreign Exchange Records of Bank of Thailand which have been recorded in the Balance of Payments table.(table 4.24 and 4.25, chart 8 and 9) We can notice that it is high distinguishing between the capital values of Inflows and Outflows.

The higher Outflows and Inflows are from the data of the Department of Insurance. This is a result of Bank of Thailand collected the total information of the foreign exchange transactions and after that separate into the objectives of that foreign exchange transactions again which including the insurance services information. Therefore, Bank of Thailand method make the total value of insurance services in the Balance of Payments lower than the exactly value.

Moreover, the information of Outflow and Inflow of foreign exchange transactions in the Balance of Payments do not assign in their function or types of insurance business which are Life, Non-Life insurance , reinsurance and retrocession. So, the value in the Balance of Payments is the premiums and claims only not including commissions or brokerages which are the part of insurance business.

Thai imports are charged with c.i.f. prices which cover transportation cost and insurance. Bank of Thailand has not separate insurance on goods from total import value (c.i.f.). This causes the lack of significant information about insurance on goods. So, foreign exchange records has less value as it should be. We can conclude that the data from Bank of Thailand are not totally absolute in details about the transactions of all international trade of insurance business.

Turning to the Department of Insurance records, it can be seen from the non-life insurance data that it has clearly classified. Non-life insurance data are classified by lines of business which are fire, automobile, miscellaneous, hull and cargo and it benefit to the study. However, Department of Insurance collected the information about insurance on goods less than the exact value because most of them are consumption abroad.

In the part of life reinsurance data, it has not been divided into local or abroad. We expected that the value of life reinsurance abroad has small amount. For income of life insurance business, we can calculate from the percentage of foreign shareholders and profit of each companies. For labor transfer, we expected that it may be deficit.



However, the deficit in the Insurance Balance of Payments from both sources of data have the same trend. And we should take precaution to compare the data between Bank of Thailand and Department of Insurance because both of sources data have difference in definition and data coverage.

For Bank of Thailand, investment income are derived from the foreign exchange records. It can be calculated by using dividend to shareholders. The investment income results of Bank of Thailand may be less than the exactly value. In this study, we use net profit which compiled from Department of Insurance Records for calculation of investment income. So, the results of the investment income from both sources of data are different. Table 26 shows the dividend payout ratio of non-life insurance business during the year 1990-1994.

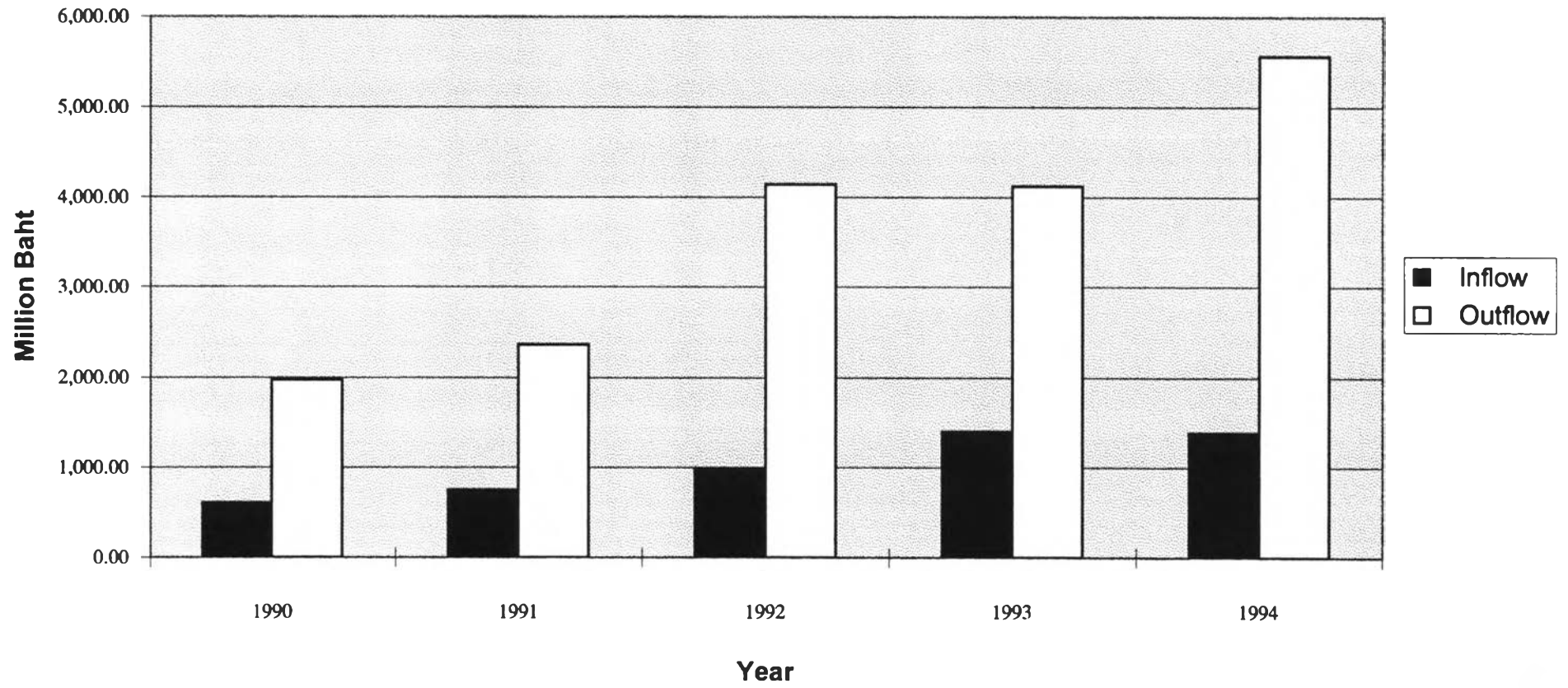
Table 4.24 : Insurance Balance of Payments from Foreign Exchange Records

	Million of Baht				
	1990	1991	1992	1993	1994
Inflow	606.70	747.00	987.00	1,400.00	1,388.00
Outflow	1,973.70	2,364.80	4,142.00	4,123.00	5,562.00
Net	-1,367.00	-1,617.80	-3,155.00	-2,723.00	-4,174.00

Table 4.25 : Insurance Balance of Payments from Department of Insurance

	Million of Baht				
	1990	1991	1992	1993	1994
Inflow	4,010.72	4,876.20	6,595.57	5,385.57	6,468.05
Outflow	6,453.35	7,762.78	8,805.45	10,534.60	13,720.42
Net	-2,442.63	-2,886.58	-2,209.88	-5,149.03	-7,252.37

**Chart 8 : Inflow-outflow of Insurance services from foreign exchange records**



**Chart 9 : Inflow-outflow of Insurance services from  
Department of Insurance records**

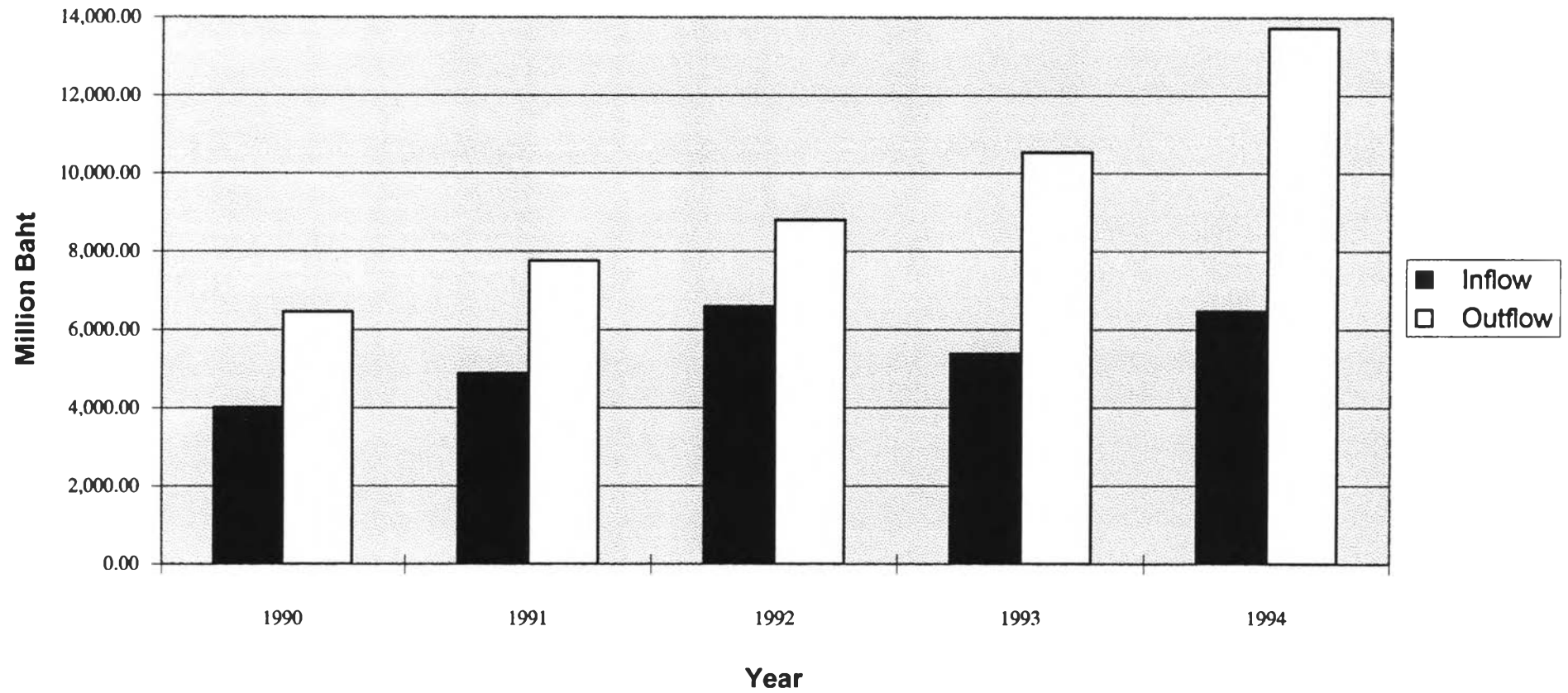


Table 4.26 : Dividend payout ratio

	Million of Baht				
	1990	1991	1992	1993	1994
<b>Dividend to shareholders</b>	566.99	936.83	1,211.88	1,525.47	1,783.06
<b>Net profit</b>	1,229.07	2,373.08	2,276.29	2,545.06	4,544.52
<b>Dividend payout ratio (%)</b>	46.13	39.48	53.24	59.94	39.24

Source : Department of Insurance