

**OFF-BALANCE SHEET ACTIVITIES  
OF COMMERCIAL BANKS  
IN THE PHILIPPINES**

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**I. INTRODUCTION**

Off-balance sheet (OBS) banking refers to those activities of commercial banks that generate income without expanding the asset portion of their standard balance sheet. In many cases, these activities also involve the creation of contingent claims against the banks; hence they are also referred to as contingent accounts.

OBS activities of commercial banks in the Philippines may be grouped into four:

1. Trade-related guarantees and foreign exchange services which include commercial and standby letters of credit (SL/Cs), future (or forward) exchange commitments, spot exchange commitments, and guarantees other than SL/Cs;
2. Fiduciary operations which refer to the banks' trust accounts and managed funds (or funds held under management);

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3. Investment banking-related accounts which include government securities held on consignment by banks, government and private securities held under custodian arrangements as part of their quasi-banking functions, etc; and
4. Payments and safekeeping accounts which consist of bills for collection, and items held for safekeeping and custodianship other than those administered by the trust departments.

The above list, which covers only those that have been monitored by the Central Bank (CB), are seemingly less sophisticated than those observed in other countries. For example, Singapore banks have options, financial futures, and revolving underwriting facilities (Adhikary 1987). However, that the CB listing could be incomplete since there are recently-developed facilities that remain unmonitored, e.g., capital funds.

OBS banking in the Philippines is not a new phenomenon. CB policies on some OBS activities (e.g., opening of letters of credit) are noted to have been issued as early as 1959. However, some have grown at faster rates than traditional on-balance sheet accounts in recent years. Their growing importance as sources of income has also been noted.<sup>1</sup> This development brings to the fore two issues: the causes of their growth and their effect on the risk profile of banks that engage in them.

The literature on OBS banking in the US make a distinction between regulatory and non-regulatory motives on banks for shifting to OBS transactions.<sup>2</sup> Two hypotheses explain the regulatory motives: (1) the regulatory tax hypothesis and (2) the moral hazard hypothesis. The former is more frequently cited. It argues that OBS activities provide banks a way of avoiding regulations related to reserve requirements and bank capital adequacy requirements. Although the CB imposes regulations on some aspects of the cited OBS activities, such as deposit requirement for trust and managed funds, these (OBS) remain unaccounted in capital adequacy standards.

The moral hazard hypothesis points out that a bank can enhance or generate the subsidies associated with fixed rate deposit guarantees by engaging in OBS activities. When deposit guarantees are provided at fixed rates, i.e., the rates are independent of the riskiness of the bank's portfolio, a bank can increase its financial leverage by having more contingent liabilities, thus increasing whatever subsidies it receives from the insurer (the Philippine Deposit Insurance Corporation). Non-regulatory factors may also have provided incentives for banks, e.g., the desire to diversify their loan and investments portfolio. James (1987) uses standby letters of credit as an example. SL/Cs permit banks to separate the interest rate risk from the credit risk

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1. For example, income from trust services alone have accounted for seven percent of the commercial banks' non-interest income from 1986; this is an improvement of the six percent recorded in 1985 and three percent in 1984 (World Bank 1988). Earlier, Lamberte (1982) included contingent accounts as one of the outputs in his multiproduct joint cost functions of banks. He found that the marginal cost curve for this variable monotonically declining, suggesting cost advantages to be gained by banks by expanding the volume of this output.

2. See James (1987) for a detailed discussion.

associated with a loan; with an SL/C issue, a bank can underwrite the credit risk while the beneficiary bears the risk of any change in the value of the loan caused by interest rate changes.

The second issue concerns the effect of OBS activities on the risk profile of banks undertaking them. As mentioned earlier, off-balance sheet activities among Philippine commercial banks, as in other countries, are not reflected in the regulatory definitions of capital adequacy; this makes the interpretation of banks' exposure to a particular risk less clear. Note that OBS activities generate three types of risks - market/position risks, credit risks, and operational/control risks -- which affect the liquidity and solvency (capital adequacy) of banks as do their normal or on-balance sheet operations.

As of year-end 1988, the total off-balance sheet accounts of commercial banks reached P160,615 million, which is equivalent to 53.7 percent of their total balance sheet accounts (Table 1). Contingent accounts due to the banks' provision of trade-related services dominated those which were generated by their fiduciary and investment banking functions. The major OBS accounts in 1978-1988 were future exchange contracts (40.1 percent), trust accounts (22.5 percent), import letters of credit (12.4 percent), bills for collection (9.5 percent), and funds held under management (9.1 percent).

During the same period, the total nominal value of these OBS accounts grew annually at the average rate of 18.1 percent, which is slightly higher than the 17.6 percent recorded for their total traditional balance sheet accounts. Among several OBS categories, contingent accounts due to the fiduciary functions of banks grew remarkably (Table 2). Funds under management had an almost six-fold increase in 1987 alone and grew by 43.3 percent in 1988. Similarly, trust accounts expanded by 31.8 percent in 1988.

This paper is an attempt to shed some light on the major OBS activities of commercial banks in the Philippines. Due to data limitations, the paper focuses on the trust and funds management accounts which have grown most rapidly in recent years, although a brief discussion on trade-related OBS activities is presented in Part II. The implications of the fiduciary facilities on several areas are studied in Part III: First, their possible effect on the solvency and liquidity risks of banks are looked into.<sup>3</sup> Second, their effect on the structure of the banking industry is studied. Since these are in essence alternatives to the traditional deposits and deposit substitutes in raising funds from surplus units, a competitive structure would be preferred to a set-up where only a few banks dominate. Evidence on this, however, show the opposite. The trust industry is less competitive than the commercial banking industry itself or the industry structure based on balance sheet operations which is already suspected of being oligopolistic (Tan 1989).

Finally, the implications of the fiduciary functions on the tenability of some supervisory requirements are also considered. The growth of OBS activities and their effects on bank risk suggest that the CB should adopt more appropriate measures for risk assessment rather than

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3. Ideally, the impact of OBS banking in general could have been considered on the riskiness of the banks using the methodologies employed by US researchers such as Goldberg & Llyod Davis (1985), James (1987), and Bennet (1987). Bank specific data, however, are severely limited to permit this.

Table 1  
Contingent Accounts of Commercial Banks a/  
(in million pesos)

Contingent Accounts	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
1. Trust Accounts	5332	6377	13562	17083	16134	21124	18677	24347	32324	27431	36168
2. Letters of Credit (L/C)	15803	16368	16360	17285	19202	20656	24741	21071	22131	20697	23100
Domestic L/Cs	1468	1803	1108	1137	526	1650	338	6558	516	1072	1337
Import L/Cs	6841	6254	5868	5360	5985	4871	8962	5496	8960	15622	19842
Deferred L/Cs	6959	7492	2813	2333	1964	3321	3982	3227	1465	687	83
Revolving L/Cs	535	233	79	53	45	46	3	4	1	31	31
Standby L/Cs	586	6494	8402	8402	9682	10768	13556	11784	11169	3316	1807
3. Bills for Collection	4014	4705	6773	6330	6629	9119	13284	7003	13801	14880	15271
4. Spot Exchange	-	-	-	-	-	-	-	81	1609	2399	1268
Bought	-	-	-	-	-	-	-	40	691	1098	588
Sold	-	-	-	-	-	-	-	41	918	1311	680
5. Future Exchange	11934	22706	36183	44624	58802	83720	119007	42546	33367	34915	39342
Bought	7566	13693	20902	25131	34265	49574	70518	31976	24140	23945	26781
Sold	4368	9013	15281	19493	24537	34146	48489	10570	9227	10970	12561
6. Items Held for Custodianship	28	11	45	107	23	442	260	57	12	27	3
7. Funds Held under Management	-	-	-	-	-	-	-	-	1501	10144	14540
8. Others b/	5059	6670	10253	10203	10107	19819	18805	17123	16172	70667	30823
Total	42170	58837	83176	95632	109897	153879	194684	112228	120917	181160	160615
Total Balance Sheet Accounts	68679	87483	144134	168912	205270	248209	303476	285718	236482	259866	259227
Total Off-Balance Sheet Accounts (in %)	61.40	67.26	57.71	56.62	53.54	62.00	64.15	39.28	51.13	69.71	53.68

a/ Data in this table were gathered by the Central Bank from monthly submissions of Form 7-1605 by accounting departments of commercial banks. Trust accounts and managed funds in this table do not coincide with data in Tables 6 and 7 which were gathered from quarterly submissions of Form 7-1635 by the banks' trust departments.

b/ Include guarantees, confirmed export L/Cs, unsold underwritten securities, items held as collateral, unsold travellers' checks, government securities held on consignment, deficiency claims receivable, late deposits/payments received, and miscellaneous contingent accounts.

Table 2

**Annual Growth Rate  
Off-Balance Sheet Accounts of the Commercial Banking System  
(in percent)**

Contingent Accounts	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988	Average
1. Trust Accounts	57.11	61.90	25.96	-5.56	30.93	-12.06	31.06	32.76	-15.14	31.85	23.88
2. Commercial Letters of Credit (L/Cs)	3.58	-0.05	5.65	5.31	13.48	19.78	-14.83	5.03	6.48	11.61	4.31
Domestic L/Cs	22.82	-38.66	2.80	-53.74	213.69	-79.52	1840.24	-92.13	107.75	24.72	194.80
Import L/Cs	-8.58	-6.17	-8.66	11.66	-18.61	42.93	-21.03	63.33	73.96	27.01	15.58
Deferred L/Cs	7.66	-62.45	-17.06	-15.82	69.09	16.39	-16.87	-54.60	-53.11	-87.92	-21.42
Revolving L/Cs	-56.45	-66.09	-32.91	-15.09	2.22	-93.48	33.33	-75.00	-100.00	-44.83	-44.83
Standby L/Cs		1008.19	29.38	15.23	11.22	25.89	-13.07	-5.22	-70.31	-45.51	106.20
3. Bills for Collection	17.21	43.95	-6.54	4.72	37.55	45.80	-47.32	97.07	7.82	2.63	20.29
4. Spot Exchange											
Bought								18.86	0.49	-0.47	6.29
Sold								16.28	0.57	-0.46	5.46
Total								21.39	0.43	-0.48	7.11
5. Future Exchange	90.26	59.35	23.33	31.77	42.38	42.15	-64.25	-21.57	4.64	12.68	22.07
Bought	80.98	52.65	20.23	36.35	44.68	42.25	-54.66	-24.51	-0.81	11.84	20.90
Sold	106.34	69.54	27.56	25.88	39.16	42.00	-78.20	-12.71	18.89	14.50	25.30
6. Items Held for Custodianship	-60.71	309.09	137.78	-78.50	1821.74	-41.18	-78.08	-78.95	125.00	-88.89	196.73
7. Funds Held under Management									575.82	43.34	308.58
8. Others	31.84	53.72	-0.49	-0.94	86.20	-0.07	-8.94	-5.55	336.97	-56.24	43.65
<b>Total</b>	<b>38.52</b>	<b>41.37</b>	<b>14.98</b>	<b>14.92</b>	<b>40.02</b>	<b>26.52</b>	<b>-42.35</b>	<b>7.74</b>	<b>49.82</b>	<b>-11.34</b>	<b>18.12</b>

Source of basic data: Central Bank of the Philippines.

impose higher reserve requirements. The latter may only encourage the trustee banks to engage in more risky (and higher yielding) transactions to compensate for the reduction in income due to these required deposits on trust and managed funds.

## II. TRADE -RELATED OFF-BALANCE SHEET ACCOUNTS

### A. *Nature of Letters of Credit and Future Exchange Contracts*

Letters of credit (L/Cs) and future exchange covers are the two major trade-related OBS facilities of commercial banks. Under the letter of credit, the bank agrees to pay to the beneficiary (the party who is entitled to draw under the credit) against that party's presentation of documents stipulated in the L/Cs. There are two basic types of L/Cs: commercial and stand-by. Commercial L/Cs are used to finance the movement or storage of goods and are normally payable by the bank after it receives documents conveying title to the goods. Commercial L/Cs being issued by Philippine commercial banks include: (1) domestic and foreign L/Cs which may be drawable by sight drafts or term (usance) drafts, (2) deferred L/Cs which provide for drawings on installment basis, (3) revolving L/Cs which are automatically reinstated within a fixed period, and (4) export L/Cs which are opened by foreign importers in favor of local exporters and which are received from foreign correspondent banks and confirmed by the local bank.

Standby L/Cs do not involve movement of goods and are generally payable to the beneficiary following a financial default by the account party in the nonperformance of a contractual obligation. In essence, a standby L/C is established as a guarantee that a business transaction will be performed.

There are several apparent reasons for the "growth" of letters of credit. From the demand side of the market, L/Cs have evolved primarily in response to traders' need for guarantees which banks conveniently provided. The L/Cs importance in trade and financial transactions is due, to firstly, the bank having better information than the beneficiaries and, secondly, the belief that L/Cs generally eliminate risk.

The growth of these contingent accounts could be associated, generally, with developments in the country's domestic and international trade. Import L/Cs were endorsed by the CB, through Circular 808 on June 26, 1981, requiring all importations valued at more than US\$1,000.00 to be covered by letters of credit. The same requirement is imposed on importations valued at less than US\$1,000.00 where it is shown that: (1) there is more than one importation of the same commodity category from the same supplier, (2) the aggregate value of the importations exceed US\$1,000.00, and (3) the importations were shipped/mailed on the same or successive date/s. Export L/Cs have also become indispensable in the export financing system, e.g., the rediscounting schemes of the CB.

The banks' sales and purchases of future (forward) exchange are important to traders and those with transactions involving a foreign currency because these enable them to hedge against the risk of exchange rate fluctuations. This facility also serves the purpose of speculators or those



who hope to gain from betting on the future value of a currency. A speculator can buy a future exchange from a bank from which he profits if spot rates rise at the maturity date of the contract. Thus, the demand for future exchange is primarily influenced by the stability or instability of the peso vis-a-vis foreign currencies which, in turn, are subject to the condition of the country's current accounts or balance of payments. For speculators, the interest rates prevailing in other countries are also important. But, since the Philippine capital market is not integrated internationally, the interest rate differential is not as important as the exchange rate movement. This is shown in the following ordinary least squares estimation of the future exchange purchases by commercial banks during the period 1978-1988:

$$\text{FEB} = 18440.672 + 109808.87 \text{ DEPN} + 86.61 \text{ IRD}$$

(8.68)                      (6.38)                      (0.33)

$$\bar{R}^2 = .893 \quad F = 42.60$$

FEB : future exchange bought in pesos

DEPN : average depreciation rate of the peso vs. US\$ or the change in the price (exchange rate) the future exchange purchases.

IRD : difference of average 3-month LIBOR and 91-day Treasury bill rates. In most years, the LIBOR rate is lower than the T-bill rates, hence the positive sign of the coefficient.

Commercial banks had future exchange contracts with the CB until 1984, along with their other customers. Although there is no available data from the CB, a substantive portion of the commercial banks' total future exchange contracts were most likely commitments with the CB. This is consistent with the observation that the commercial banks' annual "future exchange bought" always exceeded "future exchange sold" (Table 1). Normally, commercial banks buy future exchange from exporters, "bear speculators," and the CB, while they sell to importers and "bull" speculators. If most of these were direct transactions with traders, it is expected that "future exchange sold" should have been greater than "future exchange bought," at some years at least since our imports consistently exceeded our exports.

The CB ceased providing new forward covers since October 14, 1984. What has remained is the renewal of outstanding contracts. This policy partly explains the decline in the future exchange purchases of commercial banks after 1984: these declined sharply by 54.7 percent in 1985 and by 24.5 percent in 1986. The absence of new forward cover protection by the CB could be explained in the light of the losses it absorbed from the devaluation of the peso, especially during the BOP crisis years (1983 and 1984). The exchange rate, which stood at 9.29 in January 1983, jacked up by more than 100 percent to reach 19.9 by December 1984. The World Bank Financial Report (1988) estimated the losses from forward covers of the Central Banks, as reflected in its balance sheet (part of an item called "Revaluation of International Reserves") as of 1985, to be P22.4 billion or 52.83 percent of its total assets. The continued operation of the

facility would also have made more difficult for CB to agree to or recommend devaluation if this meant more losses from forward covers.

### B. *Implications on Bank Risk*

In looking into the possible effects of the letters of credit on the bank's solvency and liquidity risk, two policies have to be considered: (1) a policy requiring marginal deposits or security before L/Cs are issued would minimize the adverse effects of L/Cs on the bank's solvency and may, in fact, improve the short-term liquidity profile of the bank (cash marginal deposits would increase the liquid assets of the bank); and (2) a policy imposing reserve requirement on the marginal deposit would negate the positive effects of these deposits on the bank's liquidity.

Presently, marginal deposit rates for commercial L/Cs are not imposed by the CB but are subject to the individual bank's policy. Generally, the rates, which range from zero to fifty percent, would differ depending on the bank's relationship with the account party and the commodity being traded. The CB, however, imposes reserve requirements on the marginal deposits of import L/Cs; their rates had been determined in relation to monetary policy. During the BOP crisis in 1983, for example, the rates for all categories of commodities were increased to 100 percent, supposedly to reinforce other anti-inflation policies. The rate was reduced in 1987 to 50 percent (Table 3).

In the absence of CB-imposed marginal deposit requirements, the main regulatory instrument of the authorities for L/Cs is the inclusion of outstanding L/Cs (regular, standby, deferred) less marginal deposits, as well as outstanding guarantees in the single borrower's loan limit (Circular 857 dated March 5, 1982).<sup>4</sup> For standby SL/Cs, CB requires that total SL/C accommodations, including guarantees, should not exceed 50 percent of the bank's unimpaired capital and surplus.<sup>5</sup> Also, all SL/C issuances, including those in favor of the government should be done on a secured basis. Security may be in the form of (1) real mortgage and/or bonds/securities issued or guaranteed by the CB, (2) other forms of collateral such as hold-out on deposits or assignments of contract receivables, and (3) a second mortgage on real estate provided that the loanable value in excess of the first mortgage loan is sufficient to cover the amount of the L/C under the second mortgage.

One simple way of evaluating the effect of L/Cs on the risk profile of banks is to look into the SL/Cs and networth ratio of commercial banks on which data is available for the period 1983-1987. From 1983 to 1986, the ratio ranged from 55.6 percent (1986) to 68.1 percent (1985); the ratio dramatically declined to 14.7 percent in 1987 due to the drop in outstanding SL/Cs from P11.2 billion in 1986 to merely P3.3 billion (Table 4). These proportions exceeded the 50 percent ceiling imposed by CB, although there could have been SL/Cs which were fully secured by cash

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4. Exemption from the single borrower's limit include: (1) L/Cs to guarantee construction contracts abroad of Philippine firms, (2) L/Cs for the account of government-owned or controlled corporations which are fully guaranteed by the national government or its instrumentalities, (3) L/Cs guaranteed by PhilGuarantee and other government agencies, and (4) L/Cs to guarantee construction of local projects that are foreign-assisted and internationally bid, the contract for which have been won by Philippine contractors.

5. Exemption from the 50 percent limit include SL/Cs fully secured by cash, hold-out on deposit/deposit substitutes, or government securities.

**Table 3**  
**Required Reserves on Margin Deposits on**  
**Import Letters of Credit (L/Cs)**

Circular	Date	Required Reserves
Circ. 852	Feb. 15, 1982	For Import L/Cs opened on or before March 1, 1982:
		Reserves (%)      Effective date
		90                      3-1-82
		80                      4-1-82
		70                      5-1-82
		60                      6-1-82
		50                      7-1-82
Circ. 968	Nov. 2, 1983	100% for all categories
Circ. 1136	Feb. 27, 1987	50% for all categories

Source: Central Bank Annual Report, various years.

**Table 4**  
**Standby Letters of Credit (SL/Cs) and Net Worth of Commercial Banks,**  
**Year-End 1983-1987 (in million pesos)**

	1983	1984	1985	1986	1987
SL/Cs	10768	13556	11784	11169	3316
Net Worth	18178	22449	17312	20098	22586
SLC/Net Worth (%)	59.24	60.39	68.07	55.57	14.68

Source of basic data: Central Bank of the Philippines;  
Annual PNB Reports on the Commercial Banking System.

and other liquid assets. Heightening this adverse effect on the capital adequacy of banks is the fact that the CB does not have penalties for banks that exceed the ceilings. Moreover, the operational definition of the networth to risk ratio, which is the basic ratio monitored by CB for supervision purposes, excludes SL/Cs as well as other contingent accounts.

Theoretically, however, there is no *a priori* reason to expect that SL/Cs and other OBS activities increase the default risk of deposits. James (1987) argues that this would depend on the reasons why banks undertake those activities. The moral hazard hypothesis suggests that these could provide a way for a bank to increase leverage and hence increase the risk of deposits when: (1) the deposits are subjected to a fixed rate deposit insurance pricing, and (2) the OBS activities are not subject to capital requirements. On the other hand, an alternative explanation points to the possibility that SL/Cs permit banks to engage in lending in areas that they would find unprofitable (though less risky) to undertake if they were restricted to funding loans through deposit financing. The implicit assumption of this argument is that deposit financing is more costly; thus undertaking it should yield higher returns which are most likely the riskier ones too. Of the two possibilities, however, the evidence on the negative effect of SL/Cs on the capital adequacy of commercial banks support the contention that SL/Cs have exposed the banks' depositors to greater risk.

### III. TRUST AND FUNDS MANAGEMENT OPERATIONS

#### A. *Nature of Trust and Fund Management Operations*

Trust and funds management operations of banks are generated by the principal (trustors/funds owner)-agent. The agent administers, holds, and manages the funds and/or property for the use, benefit or advantage of the principal or the beneficiaries. This basic feature is present under both trust and funds management operations. Under trust, however, the trustee has the general authority and responsibility to the administer and manage the trust account, i.e., the bank itself formulates policies regarding the investment and disposition of funds, subject to restrictions provided in the agreement establishing the trust. Under funds management, the trustee bank acts only as an agent or representative of the fund owner, without obtaining legal title to the property. The agreement binding the management has the following features set by the CB:

(1) *Risk sharing*: In trust agreements, the risk or responsibility in case of loss in the investment of funds will be shared between the two parties. In funds management, no such feature is explicitly prescribed, but it is implied by the policy on the agent's fees and commissions;

(2) *Expected income*: The principal (trustor) shall not be promised a fixed rate of return or income, except when the specified use of the funds have such return;

(3) *Agent's fees*: This shall be based on the basis of the cost of services rendered and "responsibilities assumed," and not on some excess over a target return.

As of 1989, the banks authorized to engage in trust and fund management operations included the twenty-five domestic commercial banks, one local branch of a foreign bank (Hongkong and Shanghai Banking Corporation [HSBC]), the three specialized government banks (Development Bank of the Philippines, Land Bank and Philippine Amanah Bank [PAB]), and eight thrift banks. So far, HSBC and PAB have not exercised this authority. As of year-end 1988, trust assets of commercial banks (except for the branches of foreign banks) relative to their total balance sheet assets ranged from one percent (Philippine National Bank) to 40 percent (Citytrust). Measured in terms of their deposit liabilities, these ranged from 1.2 percent (Philippine National Bank) to 75.5 percent (Citytrust). (Table 5)

A summary of the trust and fund management operations of commercial and specialized government banks from 1984 to 1988 are presented in Tables 6-9. There are four major types of trust accounts: (1) personal private trusts, (2) corporate or institutional trusts, (3) common or commingled trust plans, and (4) agencies other than investment management agencies (IMAs).<sup>6</sup> For the period 1984-1988, most of the trust accounts of commercial banks were sourced from common trust plans (42.8 percent) and corporate/institutional trust accounts (46.2 percents); specialized government banks (SGBs) held mostly corporate trust accounts (92 percent). Under fund management operations, the accountabilities of commercial banks and SGBs were mostly due to IMAs.

Commercial banks funnelled most of their trust accounts to investments in the money market (28.6 percent) and loans (26.1 percent). Their funds management operations also favored loans (44.8 percent) and investments in money markets (24.9 percent). Other trust assets of commercial banks were invested in bonds and other debt instruments (15.8 percent), cash and deposit in banks (14.5 percent), investments in short-term stocks (3.7 percent), real estate investments (1.4 percent) and equity investments (one percent).

Specialized government banks also had most of their trust assets loaned out (40.2 percent) and invested in the money market (38.9 percent). A substantial part of their assets under fund management were invested in bonds and other debt instruments (63.2 percent).

Recently, interest in fiduciary accounts have focused on their effect on the risk they bear on commercial banks' operations. Trust accounts are also suspected of being increasingly used to engage in normal banking activities (lending and investing) on an off-balance sheet basis, thereby providing the banks convenient means to bypass reserve requirements and other regulations, as well as opportunities to further strengthen their dominance in the banking industry. Finally, another important issue relates to their effects on savings mobilization: have these attracted savings outside of the formal financial market or have these been merely substitutes for less attractive financial assets?

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6. Investment management agreements/agencies (IMAs) represent accountabilities of the trustee bank under agreements whereby the trustor (individuals, corporate, or commingled) grants full or limited discretionary authority to the trustee to invest trust funds in assets enumerated in the covering investment management agreements.

Table 5  
Total Assets, Liabilities, and Trust Accounts of Commercial Banks  
(in million pesos)

Banks	1986					1987					1988				
	Total Assets	Total Deposit Liab- Lites	Trust Accounts	Trust Acct./ Dep.Liab (%)	Trust Acct./ Assets (%)	Total Assets	Total Deposit Liab- Lites	Trust Accounts	Trust Acct./ Dep.Liab (%)	Trust Acct./ Assets (%)	Total Assets	Total Deposit Liab- Lites	Trust Accounts	Trust Acct./ Dep.Liab (%)	Trust Acct./ Assets (%)
<b>Unbanks</b>															
PNB	38758	29653	312	1.20	0.80	31288	18930	977	5.16	3.12	26813	16858	1211	7.16	4.50
Allied	5470	6755	2835	43.45	30.99	7250	4860	808	16.48	11.06	5672	4612	644	13.96	9.85
BPI	26280	21334	1836	8.61	6.99	20562	16968	1522	9.97	7.37	18333	14631	1380	9.43	7.53
Citytrust	8091	4237	3201	75.55	39.56	6967	3886	3288	84.10	47.69	5684	3073	2433	79.17	42.96
Equitable	8190	6432	2611	40.59	31.88	6926	5263	1947	35.96	28.52	5632	4208	1596	37.93	28.34
Far East	28093	21112	2989	14.06	10.57	19246	14379	2487	17.30	12.92	15430	11278	7896	69.94	51.11
Mamla Bank															
Metro Bank	25729	19723	1684	8.44	6.47	19202	15313	1265	8.26	6.59	15943	12461	760	6.10	4.77
PCIB	19676	14237	5127	36.01	26.06	17151	11449	3947	34.47	23.01	14269	10338	4262	41.22	29.67
UCPB	16173	11536	3753	32.53	23.21	13976	9083	3119	34.34	22.32	10564	5443	3210	56.97	30.39
									0.00						
									0.00						
<b>Private Domestic Banks</b>															
Associated	2518	2221	28	1.26	1.11	2509	1877	35	1.86	1.39	2623	1868	69	3.64	2.59
Boston (Combank)	2150	1571	487	31.00	22.65	1751	1027	120	11.68	6.85	1900	902	135	14.97	7.11
China	6015	4715	1541	32.68	25.62	5097	3971	1126	28.36	22.09	4518	3308	837	25.30	18.53
Consolidated	6937	6607	165	2.50	1.87	6596	5235	119	2.27	1.80	6501	4808	714	14.85	10.98
Interbank	7274	2966	1378	48.01	18.92	5208	1587	778	49.02	14.94	4225	1325	1325	100.00	31.36
Philbanking	3699	2403	3101	2.16	1.41	3482	2751	103	3.74	2.96	3250	2535	91	3.45	2.77
PBCom	5010	3101	600	19.35	11.96	3551	1922	556	28.93	15.66	2898	1638	542	33.07	18.76
Philtrust	3938	3096	52	1.68	1.32	3035	2361	52	2.20	1.71	2672	2095	61	2.91	2.28
Pipinas	1425	721	41	5.69	2.89	1596	659	28	4.26	1.75	1632	745	25	3.36	1.53
Producers	3121	1208	85	7.04	2.72	2778	1182	45	3.91	1.62	2619	1616	77	4.76	2.94
Prudential	7879	5933	756	12.74	9.60	6256	4684	448	9.56	7.16	5672	3989	391	9.65	6.89
Republic	7604	1755	113	6.44	1.49	6330	1455	175	12.03	2.76	5733	1632	147	9.01	2.58
RCBS	11169	7361	3528	47.80	31.59	6221	5641	2768	49.07	33.67	6430	4224	2457	58.88	38.68
Security	4656	3825	923	24.13	19.78	4811	3759	648	17.24	13.47	4657	3262	737	22.99	15.83
Traders	3853	2974	224	7.53	5.81	3408	2685	234	8.72	6.87	3724	2821	164	5.81	4.40
Union	3690	1997	1214	64.00	32.90	3596	2058	461	22.40	12.82	3417	2257	173	7.73	5.06
<b>Total</b>	<b>309960</b>	<b>195860</b>	<b>35593</b>	<b>18.17</b>	<b>11.48</b>	<b>259966</b>	<b>153511</b>	<b>27034</b>	<b>17.81</b>	<b>10.40</b>	<b>236381</b>	<b>136301</b>	<b>32323</b>	<b>23.89</b>	<b>13.67</b>

Source of basic data: PNB Annual Reports on the Commercial Banking System.

**Table 6**  
**Trust Assets and Accountabilities of Commercial Banks**  
(in million pesos)

	1984	1985	1986	1987	1988
Total Assets	11260	15453	22457	21602	27575
Cash, checks, and other cash items & deposits in banks	2638	3101	1890	2981	3626
Loans	3108	3006	5784	5894	7827
Investments in money market	1638	4898	9744	4846	6999
Investments in short-term stocks	397	356	606	1089	1183
Investments in bonds and other debt instruments	255	2966	3686	3424	4240
Long-term equity investments	303	296	115	58	44
Real estate investments	214	307	269	340	299
Miscellaneous assets	2657	523	363	2970	3357
Accountabilities	11260	15453	22457	21602	27575
Private trust	2274	1452	1272	1483	1797
Corporate/Institutional	5356	8572	11636	9244	10585
Agencies other than Investment Management Agencies (IMAs)	14	64	269	279	393
Common trust plans	3183	4981	9032	10448	14456
Others	433	384	248	148	344

Source: Central Bank of the Philippines.

**Table 7**  
**Fund Management Assets and Accountabilities**  
**of Commercial Banks (in million pesos)**

	1984	1985	1986	1987	1988
<b>Total Assets</b>	<b>6837</b>	<b>9484</b>	<b>11395</b>	<b>16657</b>	<b>23624</b>
Cash, checks, and other cash items & deposits in banks	754	982	3187	716	1539
Loans	2738	2579	3187	9241	12718
Investments in money market	1444	2921	4332	3473	4767
Investments in short-term stocks	159	619	839	580	731
Investments in bonds and other debt instruments	1207	1723	1294	1845	2996
Long-term equity investments	194	200	203	3	-
Real estate investments	64	54	91	58	263
Miscellaneous assets	277	406	380	741	610
<b>Accountabilities</b>	<b>6837</b>	<b>9484</b>	<b>11395</b>	<b>16657</b>	<b>23624</b>
Investment Management Agencies (IMAs)	6058	7629	10391	15922	20489
Others	779	1855	1004	735	3135

Source: Central Bank of the Philippines.



**Table 8**  
**Trust Assets and Accountabilities of Specialized**  
**Government Banks (in million pesos)**

	1984	1985	1986	1987	1988
<b>Total Assets</b>	1534	1771	2119	3040	2686
Cash, checks, and other cash items & deposits in banks	102	147	155	61	68
Loans	574	620	789	1008	1489
Investments in money market	440	610	869	1678	739
Investments in short-term stocks	-	38	-	-	-
Investments in bonds and other debt instruments	40	168	18	-	37
Long-term equity investments	167	-	187	175	174
Real estate investments	-	-	-	-	-
Miscellaneous assets	211	188	101	118	179
<b>Accountabilities</b>	1534	1771	2119	3040	2686
Private trust	18	30	86	319	140
Corporate/ institutional	1515	1741	2033	2721	2247
Agencies other than IMAs (Investment Management Agencies)	1	-	-	-	289
Common trust plans	-	-	-	-	10
Others	-	-	-	-	-

Source: Central Bank of the Philippines.

Table 9  
Fund Management Assets and Accountabilities of Specialized  
Government Banks (in million pesos)

	1984	1985	1986	1987	1988
<b>Total Assets</b>	<b>807</b>	<b>690</b>	<b>406</b>	<b>479</b>	<b>1127</b>
Cash, checks, and other cash items & deposits in banks	3	2	77	-	2
Loans	108	108	108	108	152
Investments in money market	76	76	-	-	76
Investments in short-term stocks	-	-	76	76	-
Investments in bonds and other debt instruments	560	458	110	254	837
Long-term equity investments	-	-	-	-	-
Real estate investments	-	-	-	-	-
Miscellaneous assets	60	46	35	41	60
<b>Accountabilities</b>					
Investment Management Agencies (IMAs)	807	690	406	479	1127
Others	-	-	-	-	-

Source: Central Bank of the Philippines.

### B. *Regulatory Explanations for the Growth of Trust Funds*

The demand for trust and funds management accounts are in essence demand for the commercial banks' management service. Properties are turned over to the banks with the expectation that these are held, operated, or managed in an optimal manner than if these were held or managed by the owners or trustors themselves. The trustors benefit from the bank's ability to minimize transaction cost through economies of scale and scope. Banks are also expected to absorb part of the investment risk; thus trust operations may also be seen as risk-reducing facilities.

In the 1980s, trust and fund management accounts emerged as convenient means of evading regulatory taxes particularly reserve requirements. The upsurge of trust and funds management accounts in commercial banks started in 1985 when these grew by 31.1 percent over the previous year's level and when sharp reductions in deposit substitutes were also recorded (Figure 1). After the 1981 Dewey Dee crisis,<sup>7</sup> which adversely affected the money market, deposit substitutes grew by merely 0.7 percent in 1982 and 3.3 percent in 1983; Thereafter, these contracted at the average annual rate of 31.3 percent during the period 1984 to 1988. Meanwhile, trust and fund management accounts of commercial banks expanded at the average rate of 29 percent from 1985 to 1988. The possible shifting of large depositors' funds from deposit substitutes to trust and fund management accounts may be explained by the increase in reserve requirement for deposit substitutes which reached 24 percent in 1984 as against only 10 percent for common trust funds and none for other trust plans.<sup>8</sup>

Also, trust operations are alledged to have been used by banks in circumventing reserve requirements on traditional deposits. The practice is to put pooled or individual deposits in excess of P100,000 in the bank's trust departments (World Bank 1988). These are then invested in time deposits with maturities of more than 730 days which are subject to only five percent reserve requirement as against the 21 percent imposed on shorter-term deposits. Banks have also been reported to transfer loan accounts to their trust departments in order to facilitate compliance (albeit in a roundabout manner) with regulations on their loan portfolio, e.g., agri-agra law which directs banks to lend 25 percent of their loanable funds to agricultural/agrarian reform loans.

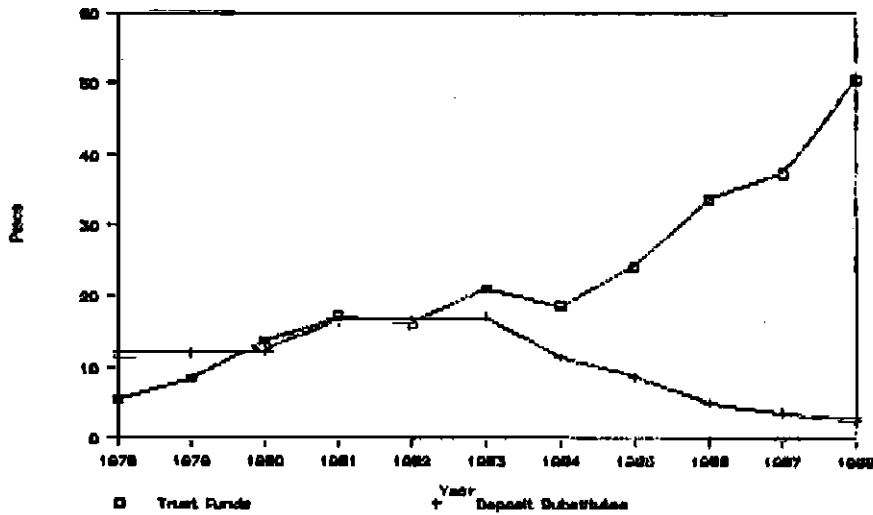
Moreover, the gross receipts tax which is imposed on all interests, commissions, and discounts from lending activities of banks would not apply to income from trust loans and investments since these do not accrue to the banks themselves. Placement of funds in the banks' trust departments also provides the trustors or fund owners a way of shielding themselves from higher income tax rates, i.e., they are subjected to a 20 percent final tax as compared to a 35 percent tax if they lend out directly and reported the same income in their income tax returns.

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7. Mr. Dee was a prominent businessman who left the country in January 1981. He left behind unpaid debts of about P635 million, triggering a massive wave of preterminations, i.e. investors recalled their money market placements before maturity date (This is discussed in Yap et al. [1990] and Lamberte [1989]).

8. A deposit of P250,000 is required on each P35.5 million or a fraction thereof, of trust assets and managed funds in excess of P142 million. An additional deposit of 10 percent of common trust funds is also required.

Figure 1  
Trust Funds and Deposit Substitutes, 1975-1988  
(in billion pesos)



Year	Trust & Managed Funds of KBs	Deposit Substitutes
1978	5.332	11.4939
1979	8.337	11.9509
1980	13.562	12.3714
1981	17.083	16.4522
1982	16.134	16.5656
1983	21.124	17.1063
1984	18.577	11.2757
1985	24.347	8.6085
1986	33.825	4.8745
1987	37.575	3.6054
1988	50.708	2.5342

### *C. Implications on Solvency and Liquidity Risks*

Risks arising from fiduciary lending and investments is to be shared between the bank and trustor, as per CB policy. In practice, however, these have been assumed by the bank. The World Bank Report (1988) cites the sale of uncollectible papers of the trust department to the bank proper which is not subject to regulation. Both the solvency and liquidity of the balance sheet operations are thus adversely affected.

The usual measure employed by the CB in monitoring the solvency (capital adequacy) of banks is the net worth to risk asset ratio, which should have a minimum of 10 percent for commercial banks, 8 percent for those with net worth of P500 million, and 6 percent for those with a P700 million net worth. The incremental effect of the trust operations on this ratio in 5 commercial banks is presented based on their list of what constitutes risky assets.<sup>9</sup> A reduction of the net worth to risk asset ratio, from a range of less than 1 to 4 percentage points, is noted for this sample (Table 10). These are quite important for banks which are already highly leveraged. Note that the total risky assets of the banks' fiduciary departments approximate the amount of uncollectible papers that can be sold or passed on to the bank proper if these indeed become uncollectible.

To address the potential solvency problems that trust operations may generate, the CB imposed limitations on the management of trust funds, the disposition of which are left to the discretion of the trustee banks. Loans and investments of such trust funds are limited to: (1) loans secured by a hold-out on, assignment or pledge of deposits, deposit substitutes, mortgage, chattel mortgage bonds, and pledge of gold or silver bullions; (2) secured medium-term loans (with maturities of up to three years) for livestock breeding and production; (3) secured loans (with maturities up to five years) for acquisition of fertilizers and any instrument/machinery; (4) first mortgage loans; (5) high grade bonds and other evidence of indebtedness, etc. Loans are also subject to rules on the loan limit to a single borrower, including those for DOSRI (directors, officers, stockholders, and related interests).

For fund management accounts, the CB also stipulates that, except as may be provided by the agreement with fund owners, 75 percent of these funds shall be invested in diverse securities which are acceptable as collateral under CB rules including government securities underwritten by the bank.

However, the above rules (except the single borrower's limit) are binding only to a certain portion of the bank's trust and funds management operations, i.e., these would not cover some

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9. Risk assets is defined as total assets minus: (1) cash on hand; (2) amount due from the CB; (3) securities and other evidence of indebtedness of the government; (4) loans secured by deposits, government securities, deposit substitutes maintained in the bank and by PhilGuarantee; (5) loans or acceptances under L/Cs covered by margin deposits; (6) bank premises, furnitures, fixtures, and equipment (depreciated); (7) balances with PNB for clearing checks drawn on banks not serviced by the CB; (8) the equivalent of at most 30 percent of outstanding sight L/Cs of amount due from foreign banks in currencies eligible as part of the international reserves; and (9) real estate mortgage loans insured by the Home Financing Commission.

**Table 10**  
**Incremental Effect of Trust Operations on Net Worth/Risk Asset Ratio**  
**as of Selected Months, 1988 (in percent)**

	Bank A	Bank B	Bank C	Bank D	Bank E
1. Trust Operations Risky Assets to Total Trust Assets a/	21.03	40.74	66.49	65.83	34.15
2. Balance Sheet Net Worth to Risky Assets	18.30	14.00	51.63	7.20	14.86
3. Net Worth to Balance Sheet and Trust Operations Risky Assets	17.40	12.03	50.40	6.73	11.02
4. Difference between (2) and (3)	0.90	1.97	1.23	0.47	3.84

a/ Computed from survey results and financial statements of banks using Central Bank (CB) formula. These may be overstated since some loans (which were not deducted from total trust assets) might have been secured by deposits and hence should be appropriately deducted, per CB formula. For Bank E, however, all secured loans were deducted from total trust assets. For Banks C and D, the results may have been further overstated since they could not have had investments in government securities which were not deducted due to lack of disaggregated investments data.

investment management accounts. Under these types of accountabilities, the fund owners would have some say on the allocation of their funds. Available data as of selected months in 1987 and 1988 show that Investment Management Funds/Accounts (IMAs) comprise 41.6 percent of 27 banks' total trust liabilities. During the period 1984-1988, IMAs comprised 89 percent of the commercial banks' total fund management operation (FMO) accounts.

Trust operations also contribute liquidity problems to the bank's normal operations when certain trust funds invested in long-term papers are withdrawn before their maturity date. These papers are sold either to the other trust accounts or the bank proper itself. Hence, the less liquid are the trust investments, the greater would be the liquidity problems they pose for the bank's normal operations. Based on the portfolio of the trust departments of all domestic commercial banks during the period 1984-1987, their non-liquid assets were estimated to reach an average of 38.62 percent of total trust assets; for funds management operations, this reached an average of 44 percent (Table 11).<sup>10</sup>

The liquidity profile of a bank's trust departments may be viewed in two ways. A higher liquidity ratio is preferred considering the abovementioned problem. On the other hand, a lower ratio is desired if savings mobilization objectives, i.e., lending of surplus funds to primary borrowers, are considered. Since the liquidity ratio of the trust and funds management portfolio of commercial banks is generally higher than their balance sheet portfolio, this suggests that banks were more conservative in managing trust funds, possibly to avoid liquidity problems. For the period 1984-1987, the commercial banks' average liquidity ratio for its balance sheet operations was 37.7 percent.

The highly liquid operation of trust departments could be traced to the attractiveness of government securities to fund owners and managers. (A fund owner may prefer investing in securities through trust departments to lower his transaction cost, i.e., cost of information-gathering, travel, record-keeping, etc.). Available data for 1987 shows that around 43 percent of the commercial banks' trust assets were invested in government securities. This proves that trust accounts could conveniently serve as captive buyers of government securities being underwritten by the banks. Moreover, the CB made compulsory the investment of government trust funds in Treasury bills, CBCIs (Central Bank Certificate of Indebtness) and other government securities, and savings and time deposits with government banks. And as cited earlier, CB requires that 75 percent of managed funds, the allocation of which are not stipulated in the agreements, be invested in the same assets.

Preference for safe financial assets also seems consistent with the apparent preference for short-term loans (with maturities of less than one year) over long-term loans. Although industry-wide loan data is lacking, this is supported by an examination of the loans extended by the trust accounts of one of the top banks (Table 12). This bank's short-term trust loan in 1986

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10. Non-liquid assets are estimated by deducting from total assets cash, "COCI (checks and other cash items) and due from banks" (receivables), investments in money market instruments, investments in bonds, and other debt instruments.

Table 11  
 Liquid Assets of Commercial Banks: Balance Sheet, Trust and Fund Management Operations  
 (in million pesos)

	Balance Sheet					Trust Operations					Fund Management Operations				
	1984	1985	1986	1987	1988	1984	1985	1986	1987	1988	1984	1985	1986	1987	1988
1. Cash, check and other cash items and due from banks	65048	68700	66611	70854	2688	3101	1890	2981	754	982	1069	716			
2. Total investments in bonds and securities	34840	33824	34409	31573	2290	8220	14036	9359	2810	5263	6465	5898			
Investments in money market instruments					1638	4898	9744	4846	1444	2921	4332	3473			
Investment in bonds and other debt instruments					255	2966	3686	3424	1207	1723	1294	1845			
Investments in stocks (short-term)					397	356	606	1089	159	619	839	580			
Total Liquid Assets	99888	102524	101020	102427	4978	11321	15926	12340	3564	6245	7534	6614			
Total Assets	303476	285718	236381	259866	11260	15453	22457	21602	6837	9484	11395	16657			
% of Total Assets	32.91	35.88	42.74	39.42	44.21	73.26	70.92	57.12	52.13	65.85	66.12	39.71			

Sources: PNB Annual Reports on the Commercial Banking System; Central Bank (Trust Fund and Management Operations).



Table 12  
Maturity Profile of Loans under Trust and Fund Management Operations  
of Sample Bank a/ (% of total loans)

	One Year and Less	More Than One Year
<b>1983</b>		
Trust	67.01	32.99
Fund Management	37.34	62.66
Total	57.60	42.40
<b>1984</b>		
Trust	65.44	34.56
Fund Management	66.89	33.11
Total	65.86	34.14
<b>1985</b>		
Trust	78.51	21.49
Fund Management	86.53	13.47
Total	81.75	18.25
<b>1986</b>		
Trust	95.05	4.95
Fund Management	48.71	51.29
Total	82.71	17.29
<b>1987</b>		
Trust	89.89	10.11
Fund Management	84.46	15.54
Total	85.00	15.00
<b>1988</b>		
Trust	58.71	41.29
Fund Management	78.58	21.42
Total	76.96	23.04

a/ One of the top five in the trust and fund management industry.

Source: Response to survey.

reached 95.5 percent of total trust assets. Note that for the same year the commercial banks' short-term balance sheet loans comprised 70.6 percent of their total assets (Table 13).

#### *D. Implications on Banking Industry Structure*

The banks' trust operations also have implications on the banking industry structure. As of 1989, there are 28 commercial banks, three specialized government banks, eight thrift banks, and 11 non-bank quasi-banks (NBQBs) authorized to undertake fiduciary operations.<sup>11</sup> Clearly, this structure furthers the dominance of commercial banks as a group in the financial system. As of 1988, NBQBs had total trust and managed funds which comprised merely 3.6 percent of those commercial banks. No data is available for thrift banks.

As of 1988, the dominant banks in the trust market included the Philippine Commercial International Bank (14 percent), United Coconut Planters Bank (10.2 percent), Far East Bank and Trust Company (8.08 percent), Citytrust (8.7 percent), and Allied Bank (8 percent); all of these are universal banks (Table 14). They account for 49 percent of the trust industry, excluding the share of thrift banks and NBQBs. Among them, FEBTC's industry share had moved in the same direction as the Herfindahl index (HI) of concentration for the industry. This means that when FEBTC's share went up to 24 percent in 1986 from merely 12 percent in 1985, the HI also went up to .1099 from .085. Similarly, the HI went down to .0761 in 1988 when FEBTC's share dipped to only eight percent.<sup>12</sup> This does not hold for the other banks, indicating the leadership of FEBTC in the industry.

Also on the 1988 HI, it seems that the trust industry is less competitive than the commercial banking industry proper, as evidenced by their balance sheet operations. The HI for the latter is .06204 which is smaller than the HI of .08005 for the trust industry. In this sense, the trust operations of commercial banks have reinforced the suspected oligopolistic structure of the commercial banking industry.

#### *E. Implications on the Bank's Ability for Term-Transformation*

One function of banks as intermediaries of surplus funds is to transform its short-term liabilities into long-term assets. There are at least two ways by which a bank's trust operations could facilitate this. First, most common trust plans prohibit their withdrawal for a given period of time, normally one month. Thus, they could enhance the banks' source of long-term funds. In preceding sections, it has been noted that some trust funds are deposited in long-term time deposits to evade reserve requirements.

Second, surplus units with idle, short-term funds could participate in common trust funds invested in long-term papers which offer higher rates of return. Funds needed by withdrawing

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11. The nine thrift banks are: Asian Savings Bank, Banco de Oro, BPI Family, Home Bankers, Monte de Piedad, Planters Development Bank, Unitrust Development Bank, and Urban Development Bank.

12. As of year-ends 1987 and 1988, however, FEBTC's fund management accounts comprised 73.6 percent and 68.7 percent, respectively, of the commercial banks' total outstanding managed funds.

Table 13  
 Maturity Distribution of Outstanding Credits, 1980-1986  
 (in percent)

	1980	1981	1982	1983	1984	1985	1986
Less than 1 year	78.1	73.4	69.0	69.3	61.0	66.3	70.6
1-3 years	10.0	17.3	18.1	15.1	24.2	16.8	15.0
3-5 years	11.9	9.3	12.9	15.6	14.8	16.9	14.4

Source: Central Bank of the Philippines, cited in World Bank Report (1988).

Table 14  
Trust Accounts of Commercial Banks and Land Bank,  
1983-1988 (in million pesos)

	1988	1987	1986	1985	1984	1983	Market Share (%)
<b>Commercial Banks</b>							
<b>EXPANDED COMMERCIAL BANKS</b>							
PNB	312	977	1211	1097	1446	1507	8.99
Allied	2935	906	844	532	465	342	2.40
BPI	1836	500	1360	422	1323	1221	7.28
Citytrust	3201	671	2433	1128	312	206	1.23
Equitable	2611	7.11	1947	4.86	4.37	555	2.86
Fair East	3989	8.08	7888	24.09	11.74	626	3.73
Manila Bank	1654	4.53	967	2.95	2.24	807	4.81
Meña Bank	5127	13.96	780	2.32	50	81	0.48
PCIB	3753	10.22	4282	13.02	1793	824	4.92
UCPB			3210	9.81	3226	2845	16.64
<b>Private Domestic Banks</b>							
Associated	28	0.06	68	0.21	47	3	0.02
Boston (Combank)	467	1.33	135	0.41	111	134	0.80
China	1541	4.20	837	2.56	337	523	3.12
Consolidated	165	0.45	714	2.18	144	255	1.54
Interbank	1376	3.75	1325	4.05	3.81	468	2.78
Priabank	52	0.14	91	0.28	31	39	0.23
PRICom	600	1.63	542	1.66	227	480	2.92
Philtrust	52	0.14	61	0.19	85	55	0.33
Philinas	41	0.11	25	0.08	7	11	0.07
Producers	85	0.23	77	0.24	15	69	0.41
Provincial	756	2.06	391	1.19	216	217	1.29
Republic	113	0.31	147	0.45	104	639	3.81
PCBS	3528	9.61	2467	7.60	1723	860	5.13
Security	923	2.51	737	2.25	658	829	4.85
Traders	224	0.61	164	0.50	1280	963	5.86
Union	1214	3.31	173	0.53	109	107	0.64
Veterans					145	154	0.92
Family					23	133	0.79
IBAA					685	483	2.88
Pacific					280	726	4.39
<b>LAND BANK</b>	1137	3.10	406	1.24	607	602	3.59
<b>Total</b>	36730	100.00	32729	100.00	18982	16761	100.00
<b>Herfindahl Index (HI) of Concentration</b>		0.076132	0.085537	0.108622	0.090474	0.075045	0.072144

Source of basic data: PNB Annual Reports on the Commercial Banking System.

participants is provided by new participants. Note that participation in common trust funds is made more attractive by higher interest rates offered to larger blocks of investments.

Evidence, however, shows that trust departments did not seem to have performed well in long-term lending. As shown earlier by the trust loans' maturity profile of one of the top five banks' short-term assets are seemingly preferred.

#### IV. SOME CONCLUSIONS: IMPLICATIONS FOR PRUDENTIAL REGULATION

The tremendous growth of the trust and fund management operations of commercial banks have important effects on the commercial banks' solvency and liquidity. Yet, policies that address these are quite inadequate.

Whereas banks are required to get the permission of trustors when trust accounts are involved in the purchase of properties from (or sale to) the bank proper, there is no parallel requirement for the bank's traditional depositors. Banks do not have to secure permission of their depositors and other creditors before they purchase uncollectible papers of their trust departments. Since the implementation of this latter condition is not feasible, the CB may consider the option of making such sale contingent on the bank meeting some minimum solvency and liquidity requirements. For example, the maximum collective amount of uncollectible papers to be sold should not increase the required networth to risk asset ratio and some liquidity ratio of the bank proper by a certain amount.

In addition, the CB could consider the inclusion of the trust and funds management assets in the networth to risk asset ratio when monitoring the capital adequacy of commercial banks. At the very least, commingled trust funds with allocation at the discretion of the financial managers should be reflected.

However, there are problems in fitting trust accounts and OBS activities in general into the present capital adequacy measures, the most important of which has to do with risk assessment. This is because the CB definition of the networth to risk asset ratio fails to consider the inherent differences in the riskiness of different asset classes, e.g., unsecured loans and investments in money market instruments other than government securities. Supervision in other countries, have employed more dynamic measures. For instance, the Bank of England assigns risk weights to different asset classes (Table 15). Thus instead of having the net worth to risk asset ratio defined simply as the CB does, they have the following capital adequacy ratio (CAR):

$$\text{CAR} = \frac{\text{Net Worth}}{\sum X_i W_i} \quad \text{where} \quad \begin{array}{l} X_i = \text{fraction of portfolio invested in asset } i \\ W_i = \text{risk weight of asset } i \text{ as determined by the} \\ \text{Bank of England} \end{array}$$

Table 15  
Bank of England Risk Asset Ratio

Example Asset	Weight
Notes and Coins	0.0
Deposits with Bank of England	0.0
Foreign Currency	0.1
Notes and Coins	0.1
Treasury Bills	0.1
Market Loans with Banks	0.2
Gilts* up to 18 Months Maturity	0.2
Gilts* over 18 Months	0.5
Guarantees and Contingent Liabilities	0.5
Advances	1.0
Property	2.0

\*Government debt in the form of marketable stocks (i.e., saleable on the stock exchange)

Source: Bank of England Quarterly Bulletin (1980), cited in Schaefer (1987).

Schaefer (1987) points out, however, that the interpretation of the weights is left vague, and the use of fixed risk weights is even less appropriate when considering contingent contracts. He, therefore, suggests the adoption of an adjusted risk weight  $\hat{Z}_i$ , instead of  $W_i$ , i.e. For example:

$$\hat{Z}_i = \frac{Z_i}{Z_a} = \frac{\alpha_i \sigma_i w_{ip}}{\alpha_i \sigma_i w_{ap}}$$

where,

$\alpha_i$  = fraction of asset  $i$  in portfolio

$\sigma_i$  = standard deviation of rate of return of asset  $i$

$w_{ip}$  = correlation between rate of return on asset  $i$  and the portfolio

subscript  $a$  : refers to a numeraire asset, e.g., interbank call loans (IBCL).

One of the features of the above approach is that it spells out the nature of the risk weight, i.e., it depends on the proportion of each asset class in the bank's portfolio and the covariance matrix of changes in asset value, as against, say, some arbitrarily determined  $W_i$ 's. The  $\hat{Z}_i$ 's also have a dynamic character in that they are unlikely to remain constant over time. Thus, this approach offers a potential tool for a better design of bank regulation and supervision by the CB.

The CB is reported to have plans of increasing the reserve requirement on trust accounts. If the purpose is to tighten "security for the faithful performance of trust duties," this measure may not be appropriate. Firstly, the "security" has in practice been provided by the implicit guarantee that the bank proper extended, e.g., purchase of uncollectible trust accounts and the promise of income. Secondly, the increase in deposit requirements would only add on to the effective cost of intermediation for trust funds. Thirdly, the deposit requirement would not guarantee that trustees and trustors would become more risk-averse. On the contrary, their investment plans may include more risky but higher yielding assets to compensate for the reduction in income due to the required deposit with the CB.

On the other hand, increasing the reserve requirement may simply be in line with the CB's policy of avoiding inflation tax (i.e., increasing money supply) which would further increase real interest rates.

## BIBLIOGRAPHY

- Adhikary, G.P. "Off-Balance Sheet Operations in the SEACEN Countries: Some Issues and Implications for Prudential Regulation." *The South East Asian Central Banks Research and Training Center Staff Papers* No. 23 (October 1987).
- Bennet, B. "Off-Balance Sheet Risk in Banking: The Case of Standby Letters of Credit." *Economic Review* No. 1 (Winter 1987).
- Cates, D. and H.A. Davis. "Revealing the Invisible Bank: Disclosure of Off-Balance Sheet Activity." *Journal of Commercial Bank Lending* (February 1987).
- Goldberg, M.A. and P.R. Llyod-Davies, "Standby Letters of Credit: Are Banks Overextending Themselves?" *Journal of Bank Research* (Spring 1985).
- James, C. "Off-Balance Sheet Banking." *Economic Review* No. 4 (Fall 1987) .
- Lamberte, Mario. "Behavior of Commercial Banks: A Multiproduct Joint Cost Function Approach." Ph.D. dissertation, University of the Philippines School of Economics, 1982.
- Schaefer, Stephen. "The Design of Bank Regulation and Supervision: Some Lessons from the Theory of Finance." In *Threats to International Financial Stability*. Portes and Sivoboda, eds. Cambridge: Cambridge University Press, 1987.
- Tan, Edita. "Bank Concentration and the Structure of Interest." University of the Philippines' School of Economics Discussion Paper No. 89-15, October 1989.
- World Bank. "Philippine Financial Sector Study." Unpublished paper, Washington, August 1988.



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