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CASH MANAGEMENT AND CASH FLOW FORECASTING FOR SHORT-TERM RISKS

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Cash management and cash flow forecasting techniques for group life and health, health maintenance organizations, yearly renewable term life and reinsurance products.

- o Cash management programs
- o Considerations in cash flow forecasting
 - Projection techniques and assumptions
 - Seasonal patterns
 - Impact of stop-loss limits
 - Claims fluctuations
- o Evaluating cash flow risks
- o Techniques for modeling investment operations

MR. DAVID H. JOHNSON: A thorough understanding of the overall cash management process can be very useful when refining individual insurance products, adapting products to a new marketplace or developing new products.

Components of Cash System

The components of a cash system may be divided into three sections:

- o Accounting and Control
- o Cash Management
- o Cash Forecasting

Accounting and control refers to recording the cash flow, making sure that receipts are allocated to the right general ledger account and dual control. Cash management refers to systematic techniques to mobilize funds. That is, getting funds in fast, using funds while available and slowing the funds in terms of going out the door. This is a short-term orientation. Cash flow forecasting (although it can be a short-term concept) is more of a long-term concept. I'm going to focus on cash management.

Objectives and Goals of a Cash Management System

I might start by talking about, in general terms, the objectives of a cash management system. They will sound like motherhood and apple pie but you might be surprised how often we find that our clients do not really take note of what these objectives are. The objectives are:

1. To identify cash needs. What are the cash requirements of the business going to be?

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2. To determine what the cash availability of the organization is.
3. To satisfy cash needs.
4. To invest the excess; that is, to use the excess. Cash is an asset only when it is utilized.

Often we find the first three objectives are met but once they are met, on a short-term basis, the notion a few extra dollars remaining idle is not considered much of a problem. In this day and age, with interest rates in double digits, it's important even on a short-term, day to day, basis to make sure you're fully utilizing all funds.

The goals of the cash management system are:

1. to make sufficient but minimum cash available to efficiently operate your business:
 - to cover your daily transaction levels,
 - to cover bank compensating balances,
 - to provide a precautionary cushion in case your forecasts are slightly off,
 - to allow for some speculative cash if you decide to take advantage of some short-term opportunities.
2. to take advantage of attractive business opportunities.

Components of a Cash Management System

Next, I would like to talk about the components of a cash management system. Keep in mind that there are cost effective techniques to address each of the cash management goals and objectives. There are ways to accelerate receipts. There are ways to control disbursements. There are ways to predict cash flows. There are ways to maximize investment income on a short-term basis. There are ways to minimize borrowing expenses on a short-term basis. There are ways to manage your bank accounts and to manage your daily cash position. It's how these elements are combined that dictate what a cash management system is and how good the cash management system is. As we go through the components of the cash management system, keep in mind that the umbrella effect that I'm trying to convey is to understand the overall process of cash management so you can apply that framework to individual products.

The first is receipts. These are cash flows which are coming into the insurance company. They come from premiums, from borrowings, etc. The second is disbursements and the third is tying it together in what I would call information and control.

Cash Receipts -- Check Collections

Let's look for a minute at the cash receipts, which we might call cash gathering. One element of cash gathering is check collections. I suppose it would be nice to be able to say that checks are on the way out and electronic payments will be used from now on. It just isn't so. Checks are still the predominant means of payment; as you can attest, the flow of checks is quite large. Some of the topics in check collections I

would like to address are mail receipts and distribution, prioritization, deposit preparation, and deposit deadlines.

In terms of mail receipt and distribution, we're talking about funds that flow into the insurance company offices or branch locations. There are a number of ways to accelerate the process. In terms of mail receipts, the questions to ask are: do funds come via letter carrier to the headquarters building? Do they come to a central mail room, or do they go to a post office box and you collect them yourselves? Those can become key issues. Experience suggests that when mail is delivered by the postman it arrives late in the day, sometimes a few hours later than if you collected it yourself. Furthermore, most of the mail that is going to be distributed by a mail carrier is emptied out of the box before a good portion of the day's mail is put in the box. Hence, if you are waiting for receipts to be delivered by a letter carrier, the odds are that your box has been emptied well before a lot of receipts have actually been posted. They will wait and they will be delivered the next day.

Mail distribution is an important aspect. We find situations where checks are distributed along with other correspondence throughout the organization. A large rollover check, for instance, may end up in the small life department. They say, "this isn't our check," and put it in the inter-office mail. A day later, it's delivered to the right area and another day later it gets into the deposit. So, the distribution can be very important and that leads right into prioritization.

A second item is prioritization of the mail receipts. I might cite an example from an insurance company in Texas, where all the receipts for the day were delivered by a letter carrier and they went to an in-clearing desk. A clerk sorted all the checks and sent the other mail away. The checks were then put in the inter-office mail to the various departments, where they arrived the following day. Department personnel, after working with the checks, put them in the inter-office mail back to the in-clearing desk for deposit preparation. As you can see, a full two or three days elapsed from the time the mail and checks were available to the time they were deposited. And that leads into deposit preparation. We've seen instances where the volume of checks was so large at certain times of the month that not all of the checks were included in the daily deposit. We also had a situation where a lot of small premium checks, literally in the thousands, came in a several day period, as well as some rather large group premium checks. They were all mixed together and were not processed on the same day as received basis. Some of the group premium checks, with this particular client, were in six figures. Again, this prioritization can be important.

Deposit preparation is also important. It sometimes makes sense to have several people making deposits and sometimes just one central deposit area, depending on flow of checks. Deposit deadlines can be important in terms of understanding the kinds of check collections that you have. A couple of cases in point. We dealt with an insurance company in Memphis that was really quite aggressive. They actually went out to one of their major groups and actually collected the check. This was the arrangement. They went out and got the check every Friday morning so that they could deposit it at the bank on a timely basis. However, they deposited the check on Friday afternoon at a bank that the check was not

drawn on. The check did not clear until Monday. Had they taken the check in and made the clearing house deadline by midmorning they would have received funds availability that day and could have invested over the weekend or, alternatively, taken that check to the bank where the check was drawn and they would have had their money on Friday. Deposit deadlines: knowing them can be very important, particularly in special situations. For this client, that one account was more important than handling 70% of the rest of their billings. It was worth the effort and they recognized special effort was necessary. However, they failed to go that extra yard.

Another situation involved two clients in Hawaii -- one an insurance company and one not. In doing those analyses, we learned that both clients were using the same courier service to take their deposit to the same bank. The interesting thing was that the courier arrived after the bank's deadline for that day's posting. One of the clients got same day credit; one didn't. Why? Well, one client had said to the bank, "we want our money the same day. We will use our own courier, we will use your courier, anything you want, we want the money the same day". And the bank had said "since it's coming in only 30 minutes after the deadline, we'll give you same day credit". The other client put their checks on the same courier, and made the deposit at the same time, but the bank did not give them same day credit. They didn't go that extra yard in understanding what the deposit deadlines were. I believe that was worth \$50,000 a year to that client in getting the bank to make that adjustment.

Some other concepts, just to mention as background, involve the amount credited in terms of depositing at the bank. There are two kinds of balances: there is the ledger balance and there is the collected balance. The ledger balance is described as follows: when you make a deposit, it's posted on the books. However, the bank, in turn, has to clear those checks before having funds that are available for withdrawal and investment. The collected balance is the amount that is available for withdrawal and investment. The two are not the same and often we notice the client says, "well, all I have to do is put my deposit in by the 2:00 deadline and I'm fine," when, in fact, there may be an important clearing deadline at the bank at 11:00 a.m. If they can get their deposit in by 11:00 a.m. they'll have more funds available for withdrawal and investment than otherwise. It is important to understand the distinction between ledger balance and collected balance, particularly in the context of deposit deadlines.

Regarding funds available for withdrawal, I think it's a minor point in our context, but it can be very important, particularly for us to know how the bank assigns float in terms of determining the collected balance. Do they say, "well, for the bank as a whole, when checks are deposited, it takes us two days to clear. So on each deposit we charge two days before we give available funds". That would be using a float factor. Or does the bank go item by item? Most large banks are able to go item by item. They use the magnetic ink on the checks, compare that to their sort patterns and determine -- based on what time of day the check is processed -- what their funds availability is going to be and what they're going to pass to the customer. That can be very important, particularly if you're going to offer a product, perhaps IRA's, that you're going to target market to one particular segment of the country and a lot of checks are going to come from one area.

In general, it's probably best to use a bank which assesses float item by item because of the accuracy. Again, it's something to think about. How the checks are cleared, through the Federal Reserve, through clearing houses, through direct sends, it can be important in terms of how fast you're going to get your money. If you're going to be depositing your checks in Chicago, for instance, and you're going to deposit them at Continental, they will clear faster, in general, than if you deposited them at any other bank in Chicago, or, probably, any other bank in the U.S.

Cash Receipts -- Funds Concentration

Let's turn to a second element of cash gathering. We talked about check collections. The next is concentration of funds, which applies particularly in situations where receipts are going to be obtained from multiple locations and deposited at various institutions. You may have a branch gathering network. You may have agents spread throughout the U.S. We have found situations where agents actually mailed checks into the home office as opposed to depositing them into local institutions. For most of these situations, you may have a need to concentrate funds into one central bank. I should mention one other case. We had a situation in Hawaii where the client had one large customer. There are only two large banks in Hawaii: First Hawaiian Bank and Bank of Hawaii. Our client, an insurance company, deposited each month at First Hawaiian, let's say, one large check which they received. It was drawn on the Bank of Hawaii. Our recommendation was to deposit that one check at the Bank of Hawaii, so it would clear on a same-day basis, and concentrate other funds at First Hawaiian. So, funds concentration applies even if you have just a single location. There are three major techniques. One is wire transfer. The second is depository transfer check. The third is inter-branch deposits.

Wire transfers are fast but expensive. There are a lot of alternatives. The money moves the same day. That is, if you wire funds from bank A to bank B today, you can withdraw and invest the funds from bank B today. There are some other features, such as making a phone call and having the funds transferred automatically. We find a lot of times, because they are so easy, that wire transfers are used far more often than necessary. A daily wire transfer is, for instance, only going to be appropriate when the amounts are quite large. A lot of our clients are wiring funds far too often. They actually pay more to move the money than moving the money is worth. Or, we find clients who have done that and said, "It's too expensive," so they don't move the money enough. They wire the money every two weeks or once a month. Wire transfers are most useful for moving a large amount of funds into a short-term investment. The second method is the depository transfer check. The DTC is a non-negotiable transfer of funds between bank accounts of the same company. It is drawn on a bank account and is payable only to another account (at a different bank) of the same company. The typical use is to draw the check for the amount of the daily collection. The check is deposited, for instance, in New York, for receipts collected in Houston. The depository transfer check deposited at the New York bank, drawn on a bank in Houston, will clear tomorrow. By that time, most of the checks that were deposited in the Houston account today have had a chance to clear. You actually have not incurred much float loss, if any, and yet you haven't had to pay a \$10 or \$20 wire transfer charge; just a charge

for the check. This may be a useful technique for bringing money in from agents. They receive checks and deposit at their local account. They notify the home office of the amount of the collections. The DTC is prepared and deposited, so the funds clear the next day or one day later. Now, again, one can go too far with this. We had one client, in fact, that received a proposal from a bank. The local office would get a on a phone, call a number, and punch in the amount of deposit to a bank network. The bank would prepare all the transfer checks. However, the funds needed to be moved only about twice a week, so the company would be paying far too much for this automated service. So the cost effectiveness of the techniques are dependent on how they are used. The DTC can be manual or automated, and it can be prepared by you or by the bank in your behalf.

A third form of funds concentration would be the utilization of branch banks. You have to be in a branch banking state to use this. If you're in California and you have everyone deposit in a branch of Bank of America, the funds may be consolidated automatically. Maybe some day that will be true across state lines. Now it isn't.

Cash Receipts -- Lockbox Processing

The third area of cash gathering is lockbox processing. It's a concept I think many of us know. We've found a lot of insurance companies who don't use this because, "I've got to look at the checks before I can deposit them." And there are those who say, "I love it and use it for everything", even when it's inappropriate.

Let's talk about the operation of a lockbox. The idea is that funds are remitted to a post office box. They are collected by a bank in behalf of the company. They are processed, credited to your account, deposited and put right into the check clearing system. The checks are photocopied and the copies are sent to the company. The company is notified of the deposit by telephone or automatically. This is the operation of the lockbox.

There are two advantages. One is the transfer of workload. Your people don't have to open envelopes, they don't have to prepare a deposit, they don't have to proof and double proof the amount of the check. Banks do it very efficiently. They have equipment that opens envelopes automatically. The investment they've made to do that for a lot of companies can be a very useful transfer of workload. Second, there is a separation of controls. The fact is that the funds will be received by people completely independent of individuals who have anything to do with the account.

A second advantage is the reduction in float which may be achieved by using a lockbox. Two major types, one is mail float, one is check clearing float. Mail float is important -- we talked earlier about a post office box and collecting there as opposed to a letter carrier. Lockboxes can go one step further in that lockbox banks collect the contents of post office boxes regularly throughout the day. They start picking up about midnight and go right through until about noon, because some 90% of most incoming mail is in the box by 9:00 a.m. or 10:00 a.m. They collect from the box every 15 minutes, every hour, or at other appropriate intervals from midnight right up to about noon. There's no

way you can cost effectively collect the contents of your box that often. Second, many major banks have unique zip codes for their lockbox customers, so the mail actually gets to the box faster than if you had your own post office box.

The check clearing process is also accelerated and that results from several factors. As the mail is opened, it is being prepared for deposit and sent immediately into the check clearing system. There's no physical way that a company could match that speed. So these are the float advantages to a lockbox.

The lockbox set up process includes determining where you want to have a lockbox. The locations of the lockbox may be important, particularly if you have, say, a nationwide campaign to solicit funds. Several lockbox locations may be useful. You can use models, which banks do use. You have to establish a contract at the bank, tell your customers to remit to the post office box. They don't know it's a lockbox, by the way, unless they happen to look on the back of their cancelled check, because the remittance address will be Life Insurance Company of America, Post Office Box 32, Denver, Colorado. The bank just has the authority to open that box.

Cash Receipts -- Pre-authorized checks

The fourth area of cash gathering I'd like to talk about is pre-authorized checks. A pre-authorized check is essentially an electronic lockbox, if you will, which allows for timely collection with very little float. Its most common use across industries is for routine individual payments to corporations. Insurance premiums are a classic use.

The idea of a PAC is that the customer signs an authorization that his account will be debited for an amount at some given time during the month at your request. The bank receives the authorization, the pre-authorized check is prepared by the company or by the bank, and it is deposited to the company account. The advantages are:

1. The timely collection. Pre-authorized checks clear on an overnight basis or a two-day basis in virtually all cases.
2. The predictability. You deposit pre-authorized checks today. Once you've done it one time you can predict what percentage is going to clear in one day, what is going to clear in two days. You know exactly what funds availability you are going to have.
3. There is reduced cost. You don't have to open envelopes, etc. Paperless pre-authorized checks can also be used, instead of going through the process of having the PAC's printed and deposited. Most PAC's are for large volume, so it's a computer generated process anyway. You just take the tape to the bank, they run it through the automated clearing house, no physical documents are prepared. This reduces printing costs, reduces the bank charges and, in many cases, reduces the float.

Let me make some general comments and summarize our discussion of cash receipts. That's been my major focus for several reasons. One, I think

it's most understandable. The first step in the process is usually the easiest to get a handle on and I think it's important as the industry establishes products and refines products, that it offer them and mechanically deliver them in a way that is in conjunction with their cash management system. A lockbox is appropriate for large receipts, such as group premiums, or IRA's. Pre-authorized checks are appropriate when you have large quantities, but the dollars aren't very large. Mail is used when some intervention is required, such as certain annuity contributions, rollovers, etc. Mail receipts are going to be best there. The key is to think of ways to prioritize the deposit.

Disbursements

Let's turn a minute to disbursements -- the other side of the coin. There are a number of techniques in cash disbursing: zero balance accounts, payable through drafts, controlled disbursement, remote disbursement, which is really the same thing, and automated account reconciliation, which really isn't a cash management technique but is a useful service and I mention it here.

The idea of a zero balance account is that all checks are drawn on a subsidiary account which each day has a balance of zero. Throughout the day, checks are processed and cleared against that account, so the account grows negative.

At the end of the day, automatically, funds are transferred from a master account into the subsidiary account for exactly the amount of clearings. So, at the end of the day, there is again a zero balance. The next day, the balance starts at zero, and the process is repeated. There is no predicting what the amount of checks is going to be. It's an automatic funding process. There's no guesswork. There are no idle funds tied up in those bank accounts. Now, you still have to manage that central account which funds the automatic transfers, but you consolidate the risks. Instead of leaving a few extra thousand in this account and that account, you leave no excess in the subsidiary accounts and you only have to manage the one main account.

Payable through drafts are used by many insurance companies. The item here is actually drawn on the company as opposed to a bank or financial institution. It's payable through the company's bank, and the company reviews the items before they're actually paid (which allows greater control and balance predictability). This can maximize float in some cases. Many banks would defer clearing payable through drafts until the following day. That's becoming less and less so.

Third is a concept called controlled disbursement, which eliminates overdrafts, keeps funds fully utilized. The idea is that checks are drawn on a bank which is outside a Federal Reserve district. Rolla, Missouri; Colstrip, Montana; Fabens, Texas. Ever heard of them? Some of the largest amounts of checks in the U.S. are drawn on banks in these towns. The idea is that those checks are drawn on banks outside a Federal Reserve city and the banks refuse to accept presentment of their checks except from the Federal Reserve. The Federal Reserve processes the checks in the evening and presents them to the bank at approximately 6:00, 7:00 or 8:00 a.m. the following morning. The bank, being an affiliate of a large organization, has the computer apparatus to quickly process those checks and say, "your account is going to be debited today

for \$2,400,000 because we just received that debit. You owe us \$2,400,000". That money is transferred in and that's it for today. As such, the exact amount of the presentment is made. There's no excess money left on deposit there. Now, that concept is not very pleasing to the Federal Reserve. It was called "remote disbursement". A problem occurred with a small bank, in Montana I believe, when the wire system went down one day. They had overdrafts in excess of their capital. The Fed was a little bit concerned; remote disbursement is discouraged. So now it's called controlled disbursement. Some of the systems operate so that they need not be remote. In Kansas City, one of our clients disburses their checks on a bank that's a 30-minute drive from the Federal Reserve in Kansas City. It's in Blue Springs, Missouri. However, because of the Federal Reserve structure that is a Kansas City country bank and in order for the checks to clear, they must be at the Kansas City Federal Reserve by, say, 3:00 p.m. today to get credit tomorrow. When a check is deposited in New York, do you know how hard it is to get to Kansas City to the Federal Reserve by 3:00 in the afternoon? That's why Fabens works so well: the deadline is 3:00 in El Paso. Getting from anyplace to El Paso on a same day basis is next to impossible. Now, the Federal Reserve is making some changes, they've identified some high clearing banks such as these and have said that the deadline instead of presenting the checks at 6:00 or 8:00 a.m., would be noon, which makes it tougher for the bank to process the checks and notify the customers and still have time for you to fund the amount and invest the excess. But, there are ways around that. So, the idea of controlled disbursement -- it does slow down the float -- is for the control. You know exactly what your check clearings are for the day. You thus don't have to keep an extra several hundred thousand dollars on deposit to cover any checks which may clear.

Information and Control -- Balance Reporting

A very significant part of a cash management system is information and control. All the techniques we've talked about are really only important if they can be applied. The idea is that you come in in the morning, pick up your Wall Street Journal, look at a terminal and know exactly where you stand, make your short-term investments for the day and focus on other things. Cash management systems should be clerically run. There just shouldn't be much day-to-day involvement of senior level people. The decision should be: here's how much we have to cover today, where do we want to pull it from and what do we want to do with it. The focus can be on what we really want to do in investment policy as opposed to handling the day-to-day activities. And yet, because of the interest rate situation and the sheer volume, value of the day-to-day management can be very significant. We've had several engagements where the pre-tax annual benefits have been in excess of one million dollars a year just from these cash management techniques. Once the system is in place, little additional effort is required, so getting your cash management system up and running efficiently can be low-cost. For the first element in the information system, reporting what the deposits and balances were, controlled disbursement becomes a very useful technique in terms of knowing where you stand on a day-to-day basis.

Information and Control -- Account Analysis

A second aspect is the account analysis. This is a bit after the fact, but a useful control aspect. This is an analysis of your account or

accounts prepared by your depository institution, your bank, which consolidates all account activity. It basically says "these are the balances you've maintained on deposit, compensate us for services provided. If not, then you'll be billed for the deficit". What happens if the balance more than offsets the service charges? Does anyone know? You don't receive an analysis from the bank. If your company is not receiving account analyses there is likely a good reason. The bank prepares them. They might say, "there's no point in passing this on to the customer".

If you want to keep extra money on deposit, the bank will accept it. We had a situation in Hawaii where, years ago, one of the banks was "nice" to one of the principals of our client and the other bank wasn't. He was keeping about two million dollars a day extra on deposit. Why? "Well, I hadn't heard anything from the bank, they provide great service, so everything is fine". All the optimization techniques in the world do no good if they are not tied together with balance management.

Let's talk about some bank services charges. Some of them can be hidden. There would be obvious things, the checks, the deposits, deposited items, wire transfers, stop payments, etc. There are other service charges for account reconciling, lockbox processing, balance reporting, specialized accounts. Banks, in this day and age, are very much fee income-oriented. I know it because we consult both sides of the fence. We advise our banks to charge their corporate clients for all their fees and services and they're doing it. The account analysis then takes the average ledger balance, subtracts out the float (again, that's checks that have been deposited but the bank has not cleared, so they don't have sufficient funds, so you don't have access to the funds either) giving you a collected balance. The activity charges, and this is for those services and allows for the bank reserve requirement (which is a percentage of their deposits which they must keep on deposit at a Federal Reserve bank in a non-interest bearing account, and since they can't use the money they don't let you use it either). They convert that to a balance required. In our example, there are deficit balances, and this was a monthly basis, so the deficit charge would be \$10.

This compensating balance thing can be very interesting. For purposes of illustration, here's two banks. For a lockbox item, bank A charges 15 cents. Bank B charges 23 cents. The question is, which bank actually requires the lower collected balance per item? Which is the cheapest for the services if you're going to pay with compensating balances? The earnings credit, and this is the rate at which your balances are valued by the bank: Bank A uses 18-1/2% and Bank B uses 13%. The reserve requirement (that is, the percentage that the bank says is tied up in non-interest bearing accounts): 16-1/4% vs. 14.50%. The float on the account we'll assume is the same. Which bank requires the lower collected balance per item? Well, when we compute that, Bank A requires you to have \$25.28 -- this is (\$0.15 item fee x 12 months) divided by (18.5% earnings credit x 83.75%) -- on deposit in collected balances for every lockbox item. Bank B: \$24.83 -- this is (\$0.23 x 12) divided by (13.0% x 85.5%). So Bank B is actually cheaper on compensating balance.

It's important when contracting with a bank to look at the whole picture. Bank selection can be very important in terms of what kinds of services you want to utilize in delivering your particular products. The

awe of the big bank is one of the major pitfalls I see in my consulting. People are afraid of the bank, so they use Bank A all of the time. "Whatever Bank A says goes and that's what we use." You can give away quite a few dollars following that philosophy.

Information and Control -- Investments and Borrowings

The third area relates to investments and borrowing. One of our insurance clients had a situation where they were rolling in CD's from their investment departments. They came through the normal collection process and there was just very little interface between the collection and investment department. The collection department wasn't on the lookout for large checks. The investment department assumed they were being deposited and didn't really even check to insure that the CD's were coming in on a timely basis. Some \$120,000 a year was "slipping through the cracks" on lost investment income from maturing short-term investments because of this lack of coordination. Control is very important -- the coordination of your day-to-day cash management system with your investment and borrowing groups. Another situation, which also illustrates a lack of coordination, was a concentration situation. An insurance company was working through a bank to sell credit life accounts and they arranged some sort of a fee reimbursement policy. Each month the bank would deposit in the insurance company's account a certain amount of the premium for credit life accounts. It was working pretty well procedurally. The transfer was to be made at the first of the month. At the end of the month a statement would be sent to the insurance company. They'd say, "that's our money -- let's transfer it out". They did that at the end of the next month and everything was fine until they looked at the average balance in the account. The excess bank balance was substantial. This resulted because the entire process of notifying how much was in the account, taking it out immediately, and then relaying that to the investment department so that they might utilize the funds was non-existent.

So, to summarize, the corporate cash management system should provide information, control and feedback. If something is not working according to plan, let's be notified and correct the out-of-control situation.

Examples

Let me conclude by talking about several situations -- and they're really simple situations. They illustrate several points, I hope. One, that these techniques we've talked about apply to even the simplest of situations, probably within your own company. Two, I think they illustrate how you can apply these techniques. Third, they show how things tend to "slip through the cracks" over time.

Here is a situation -- individual premiums, a large volume and low dollar amount. They were being sent to a lockbox and then the premium coupons were sent to the company and were processed by the company. Now, there are several inefficiencies here. One, if you're going to use the lockbox, why not have the bank process the premium coupons also? They can process them, store the information on tape and transmit it to you.

And they do that very cheaply, instead of actually duplicating the process of going through depositing the checks and the premium coupons at the company, balancing them and inputting the data manually. This

required two to three clerks on a full-time basis. The bank would have done it faster. Second, isn't this an opportunity for pre-authorized checks? Why pay the lockbox fee for a \$12 check? It just didn't make sense.

A second case, individual life premiums. Again, large volume, low dollar. Pre-authorized checks were used. They were printed by a service bureau on the due date and deposited typically one day later at the bank and then cleared a day or two later. Our comment was: why deposit on the day after the due date? Why not deposit them on the due date or even earlier? In looking at the agreements, the account could be debited on the due date. With pre-authorized checks, you have the luxury of preparing them in advance of that due date so that they clear on the due date. You know, here, even though the dollar amounts were small, it was worth about \$40,000 a year to the client just by accelerating the process several days, with no change in effort. Second, the process could be paperless. The process here was that the company prepared a magnetic tape. They gave it to the service bureau who, from the tape, produced the pre-authorized checks. A stack of cards essentially, which came back to the company, who deposited them at the bank. Why use the paper? Why not just give the tape directly to the bank and have them enter the debits through the automated clearing house? Again, on the due date or earlier.

Summary

I'd like to summarize by talking about several pitfalls to avoid. I'm really not meaning to ridicule, but instead illustrate how information about cash management doesn't tend to disseminate throughout the organization. What kinds of pitfalls are there to avoid in insurance companies? And I mentioned one already, and that is fear of the bank. So often we find that the bank was not right. A case in point -- this is to illustrate how the bank isn't always right. And you may have some similar situations. It was a money market fund that the bank was offering and our recommendation involved when the bank was beginning to accrue interest? Immediately? Lagging a day? Waiting for collected funds? The bank believed they were lagging: a one day delay to investment. A lot of funds operate that way. In fact, when we went through their processing system, we found they were not. They were paying immediately, the same day. They didn't realize it, but they were. So this thought process about the banks being right and powerful: it isn't always so.

Second, bank account management. So often account analyses are not received, they're not monitored and excess funds exist. We had a situation with a client, I think in Oklahoma, who maintained a number of bank accounts. They received the consolidated account analysis. They intentionally kept insufficient balances so they would be sure not to keep extra, and they had an arrangement with the bank so, at the end of the year, they wrote the bank a check for the deficiency in fees. And that's not a bad arrangement. The problem was that the bank was not including all of their accounts in the analysis. No one realized it. When you have scores of accounts, it is hard to keep track of them all. But that omitted account reduced the amount they had to pay the bank by \$85,000 a year. So, the second pitfall to avoid: insist on receiving those account analyses, look at them and make sure they're right. And

this becomes particularly important as you begin adding new products and you establish separate accounts to deliver that product. The real question is: is the bank as a whole, with your relationship, compensated for its services? I would never advocate undercompensating banks, but wouldn't advocate overcompensating them either. So, challenge those account analyses.

Third, challenge the use of bank accounts. So often we find, "Well, we're going to have this new product and we're going to have receipts coming in from 14 locations and there's going to be 4 different varieties, so we'll open 56 bank accounts," and that becomes quite a nightmare. Not necessary.

Fourth, timely depositing and coordination of the deposit effort, i.e., those prioritization steps, understanding the deposit deadline, etc.

Fifth, the improper use of bank services. Perhaps I've said something today that has struck a chord and one of you will say, "We really need to be using DTC's". As I illustrated earlier, the improper use can be as harmful as not using them at all. So often we find people using too many of the wrong bank services and not enough of the right ones. So, there's a proper balance to achieve.

Finally, the lack of coordination with the investment department. I think that's so important, particularly in our context today, as we're talking about the short-term. The things I've talked about today are very day-to-day oriented, and it's important that your cash management system is coordinated not only with short-term investments, but with your long-term investment strategy.

MS. DENISE FAGERBERG: When I was asked to participate in this panel and discuss cash flow on term insurance, I decided that I could sum it up in three words, "there isn't any"! However, I decided that you folks deserved more for your money than a three second presentation, and there really is some cash flow on term insurance. The whole trick is to make it as positive as possible, while the forces in the market are trying to make it negative.

Before we discuss the characteristics and factors affecting cash flow, I believe it is appropriate to examine the product and the market, particularly since I believe many of you come from a group background.

In the past few years, more companies have written more term insurance than ever before, at prices lower than ever before. In 1975, a premium of \$2.50 per thousand at age 35 was considered competitive. By 1982, with the advent of select and ultimate term and nonsmoker discounts, a premium of \$.85 per thousand was considered the norm and many companies dropped their rates even further, to near 60 cents. Since many select and ultimate term products were written under the generic name of Graded Premium Whole Life, it really is impossible to determine exactly how much term insurance has been written since 1980, but let's suffice it to say that billions and billions of dollars of term insurance were put on the books in the early eighties, much by companies with no particular knowledge of the product.

As I was fortunate enough to have priced all of the competitive term plans on a reinsurance basis during this period, I would guess-timate that at

least 80% of the term insurance written in the past few years was of the select and ultimate variety. Whether the direct writing company would admit it or not, these were all re-entry plans, typically 16 month re-entry term, although re-entries were not necessarily written with the original company. The remainder of the term sold in the eighties was basically annually renewable term, with a sprinkling of deposit-term.

Today, select & ultimate term is still a major force in the market, although annually renewable term, particularly short term varieties and ten-year renewable and convertible term products are becoming increasingly popular. As this session also deals with reinsurance term risks, I believe that Universal Life which is accounting for a growing portion of reinsurance yearly renewable term production, has certain characteristics worthy of discussion.

Each of these products has unique cash flow patterns and projection problems. In this session I want to explore these patterns and problems, and suggest some methods to improve cash flows. Positive cash flow is important in this competitive market, where profit margins are so thin, that it is literally hard to make a buck. Getting money in before you have to pay it out can measurably affect profits.

In discussing cash flow on individual term-type products, there are two characteristics which must be noted. The first is high acquisition costs. This characteristic sets individual term products apart from group products. It is not unusual to see acquisition expenses, which includes commissions, underwriting and issue costs, exceed 150% of first year premiums, and at times exceed 200% at younger ages. Commissions and agency costs alone are around 100% of premium.

With this type of high first year costs, persistency becomes very critical, more so, I believe, than in group risks where there are not so many costs to recover. Back in the seventies, first year lapse rates on ART products were about 18%, and second year lapse rates were about 21%. Ultimate lapse rates might get as low as 10% or 12%. Select and Ultimate products, and the term war in general, caused lapse rates to rise in the early eighties to all time highs for all term products. If you were in good health, you could always find a cheaper rate. Any company who kept lapse rates down to 25% per year in the first three years of this decade did well. Lapse rates in the 40's were not unusual.

A recently published study performed by Dr. Arthur Williams, professor of insurance at Penn State University validates the heavy lapse experience on all forms of renewable term products. Dr. Williams based his statistics on the records of 10 life insurance companies, following term policies from 1955 to 1980. His research showed that the average policy persisted slightly less than 2 years, and after 20 years, less than 2% remained in force. His study also showed that of all issues, less than .8% had resulted in claims.

I found these results interesting, as I had been trying to impress clients with the characteristics of term insurance. However, seeing is still believing, and I wanted to convince myself and you, particularly regarding the claim experience noted by Dr. Williams, so I ran some tests. I looked at a male, nonsmoker, aged 35 under three lapse scenarios. (Table 1)

Table 1

Lapse Illustration

Male Nonsmoker Age 35

Policy Year	Lapse Rates		
	Pattern 1	Pattern 2	Pattern 3
1-3	20	25	35
4-5	15	20	30
6+	10	15	25

Pattern 1 lapses are really very favorable, 20% for three years, then two years of 15's, followed by 10's for the next 15 years. Pattern 2 is more realistic, with 25's for the first three years, 20's for the next two years, and 15% thereafter. Pattern 3 is indicative of the experience of aggressive term writers in the past three years with lapse rates beginning at 35% and grading to 25%. Please remember that Dr. Williams' study did not include the last three years, which are probably the worst in history. Also note that lapse rates in the real world are not always multiples of five.

Table 2

Survivors

Beginning of Policy Year

Policy Year	Lapse Rates		
	Pattern 1	Pattern 2	Pattern 3
1	1000.000	1000.000	1000.000
5	460.022	336.930	191.913
10	335.852	140.132	42.333
20	196.575	26.969	2.330

Total Deaths Over 20 Years

9.037	3.247	1.370
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Looking at the survivors, under all three scenarios (Table 2), less than half of the policyholders persist to the beginning of the fifth year. Under favorable conditions 46% persisted to the beginning of the fifth year, while only 19% persist to this point on the poor persistency scenario. By the beginning of the twentieth year, under favorable conditions, 20% remain in force, while only 2% remain in force under unfavorable conditions which is what Dr. Williams found. Cash flows under all the scenarios are non-existent to negative by this time.

I also looked at the deaths over the twenty year period. Under Pattern 1, .9% of the policies resulted in deaths, and this dropped to .14% under Pattern 3. This is less than what Dr. Williams discovered. Lest you get too enthusiastic about this particular result, I must point out that even one death claim is expensive. The present value of death claims as a percentage of the present value of premiums went from about 45% to just under 40%, as one went from favorable to unfavorable assumptions, on a typical ART product. Profit as a percent of premium decreased with increasing lapse rates because of the rapidly shrinking premium base upon which acquisition costs had to be recovered.

Now that we've examined the major problems associated with term insurance, we should look briefly at projection techniques. Probably each of us present today has, at one time or another, performed simple projections using a pencil and a pocket calculator. Since most forms of term insurance lack cash values, such projections are relatively easy to perform. However, there are some particular timing problems which are hard to duplicate under this particular method. We will discuss these problems later.

With the widespread use of personal computers and spread sheet programs, many companies are making projections using these facilities. Once the initial information is set up, projections can be made rapidly, and assumption changes are fairly easy. Spread sheet programs will allow a company to perform more complex projections, involving more cells, than the simple pencil and pocket calculator method, but the complex timing problems still exist.

Many companies have full scale model office projection systems which generally require large computer capacity. These allow for more cells and more refined assumptions, but certain timing problems, not foreseen by the software companies, are often ignored. These model office systems are generally "bulky", if such a notion exists in data processing, in that they take a long time to run and it may be difficult to verify results on a cell level.

Regardless of which type of projection a company decides to make, the output is only as good as the input. In projecting term cash flows, it is important to have good assumptions. Let's review the key assumptions.

As I have said on several occasions, the lapse assumption is very critical. In order to "fine tune" a cash flow projection, monthly lapse rates are appropriate at least for 25-37 months. Term insurance lapse rates have typically been higher in the second year than in the first, as much of the replacement actually occurs after the premium increase in the 13th month. In fact, lapse rates peak in about the 16th month. This occurs because it will take about 3 months to get a new policy placed after the first premium increase.

Another area of lapse rates which is important to projections of term cash flows is the "re-entry lapse". A re-entry is a lapse for all cash flow purposes. Re-entries are occurring on a higher rate and earlier than almost any company assumed in pricing. Any select and ultimate design invites annual re-entry, and any modeling of these plans will require some assumptions about re-entries and lapses by duration. Of all the assumptions, lapses are the most volatile.

Expenses are, of course, important in projecting cash flows. While acquisition expenses are a large portion of first year premiums, renewal expenses should not be forgotten. Inflation should, of course, be considered in medium term projections. Fortunately, expenses are the most predictable portion of the equation.

While relatively few insureds died in our simple model, mortality costs on term products tend to be about 35% to 45% of premium, so mortality cannot be ignored. Mortality has become complicated with the advent of smoker and nonsmoker premiums, and re-entry products. It's a question of how low it will start and how high it will become. While some companies have projected future mortality improvement in pricing their term products, given the poor persistency experience, improvement seems unlikely, and a deterioration in mortality is probable. In projecting monthly or quarterly cash flows many companies have noted a slight seasonal pattern in mortality, with mortality being marginally higher in winter months.

When making any sort of meaningful monthly or quarterly cash flow projection, the distribution of business by mode and month of issue is critical. Persistency varies greatly by mode of payment. Many companies no longer write monthly premiums other than on a PAC basis because of persistency problems. The distribution of issues by month is also important. This distribution will vary greatly among companies because of sales contests, and product introduction dates. In general, however, sales are low in summer months.

Once the basic assumptions are set, it is important to determine the timing of all cash flows. We've already discussed the importance of the distribution of lapses and issue months which will affect receipts, so it is now time to turn our attention toward the timing of disbursements.

A major portion of the acquisition costs are the commissions. It has become very popular to annualize commissions, that is pay all of the first year commissions at issue, despite the fact that premiums are generally paid monthly. This results in an extremely large initial outflow of money in comparison to income. Since total acquisition costs may vary from 150% to 200% of that first year premium, commission annualization causes all of that expense to be incurred at issue. For example, on a \$100 annual premium, acquisition costs could be \$150, while only \$8.50 has been collected. This may prove to be very expensive practice, and it is one that is often ignored in pricing and in projections.

Another area critical to the cash flows is the payment of reinsurance allowances. Conventional reinsurance--including both coinsurance and YRT reinsurance--requires that the reinsurance premiums be paid on an annual basis, regardless of the mode by which the ceding company receives its premiums. In the first year, when coinsurance allowances are often 100% of the annual premium, coinsurance will have a neutral affect on the cash flow. However, in later years, reinsurance should have a negative impact. For example, when coinsurance allowances are 20% of annual premiums, and the annual premium is \$100, the ceding company must remit \$80 to the re-

insurer on the policy anniversary, despite the fact that the ceding company has probably received only \$8.50.

Another drag on cash flow, not often considered, is the reimbursement of claims by the reinsurer. The ceding company is generally expected to pay claims on a timely basis. There may be as much as a two or three month lag between the settlement of the claim by the ceding company, and the reimbursement by the reinsurer. This is not a premeditated practice among reinsurers but is usually a result of recently high claim volumes versus staff size. The lag in claim payments is important when dealing with a large claim volume company as well as with a small claim volume company. In an area when profit margins are slim, pennies become very important.

Since no actuarial presentation would be complete without some graphs, I charted some policy year cash flows on typical term products. I hope that you will view these graphs as representations, and will not become concerned about the actual values. They are drawn to scale, but just think about the shapes, because your cash flows could be very different.

Figure 1 shows cash flows on a generalized Annually Renewable Term product. As you can see, there is a large loss at issue. While the cash flow in the second year is positive, it is not of the same magnitude of the initial outflow. The cash flow gradually decreases as the number of policyholders decrease and will eventually become negative as mortality costs increase.

Figure 2 is of cash flows on a 10-year re-entry product. This assumes that no one re-enters before the 10th year which is highly unlikely. As in the case of an ART plan, first year acquisition costs are quite high. Because of premium and expense patterns inherent in these particular products which I am illustrating, cash flows actually increase for a few years. They then gradually decline for few years, and drop off sharply when the re-entry occurs.

At the re-entry date, the policyholders are divided into two groups, those who are able to re-enter and those who cannot. Those who re-enter incur acquisition costs again, which accounts for the dip. Note that the dip is not as low as the initial cash draw, as there are fewer policyholders involved. This group recovers in the second year, but the cash flows are small because so few remain. The group who is unable to re-enter experiences poor mortality. Theoretically, if there are no more re-entries, dividing the group further, the mortality and cash flows of the two groups will converge. The cash flows after re-entry have to be weighted, and the trick to re-entry term is that there are so many groups to weight.

Figure 3 is of a 10-year renewable and convertible term product. It begins like the other products, but as the premiums are level for 10 year periods while mortality increases, cash flows decrease rapidly, and are even negative in the tenth year before the plan renews.

This particular projection assumes no acquisition expenses on renewal, so cash flow in the eleventh year is positive. Because the premiums in the second 10 year set are meant to cover both newly selected lives as well as renewals, the cash flows on the renewal group becomes negative earlier. This pattern repeats with each renewal, with the positive peaks diminishing and the negative troughs deepening.

Now that we have looked at cash flows, how can we improve them? One of the best methods is to make term products less lapse-prone. This can be accomplished by reducing the slope of the rate scales, avoiding sharp increases. The 10-year renewable term is about the ultimate example of flattening rate scales. Another method is to levelize commission scales. Not only will it improve persistency, it will lower acquisition costs, thereby lowering first year outflow. Paying first year commissions as premiums are paid will also lessen first year cash outflow.

As for reinsurance, the ultimate goal would be to find a reinsurer who could pay claims promptly, while allowing the ceding company to pay monthly premiums one to five months in arrears. This is what happens on universal life, and the resulting cash flow for the reinsurer is bad. Given the prices some reinsurers are quoting, I don't believe that they reflect the cost involved with such a method of accounting.

I wouldn't recommend rushing out and negotiating a monthly premium reinsurance contract since it requires self administration. Also, the reinsurers are becoming more concerned about the problems involved in bulk accounting, they may be more cautious.

Figure 1

Generalized Cash Flow ART 100

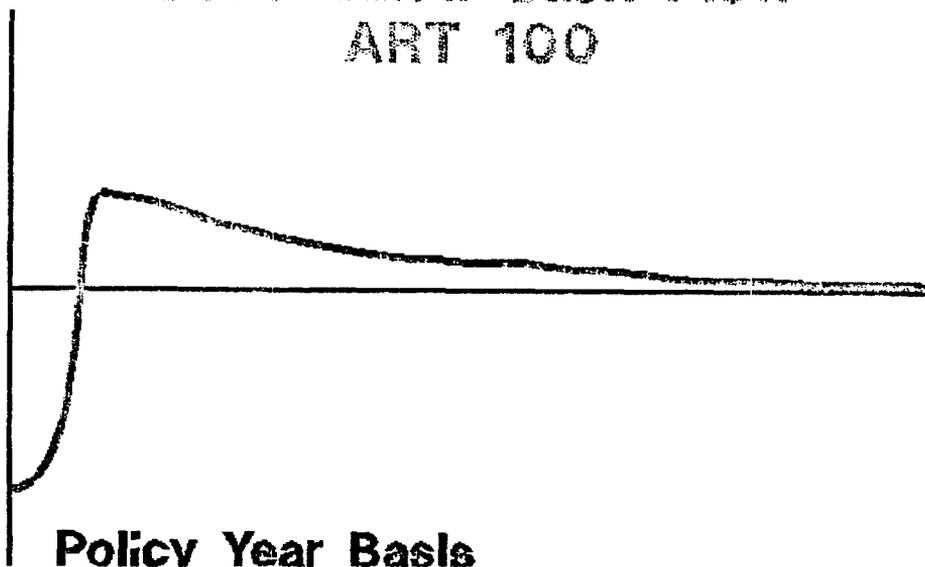


Figure 2

Generalized Cash Flow 10 Year Re-entry Term

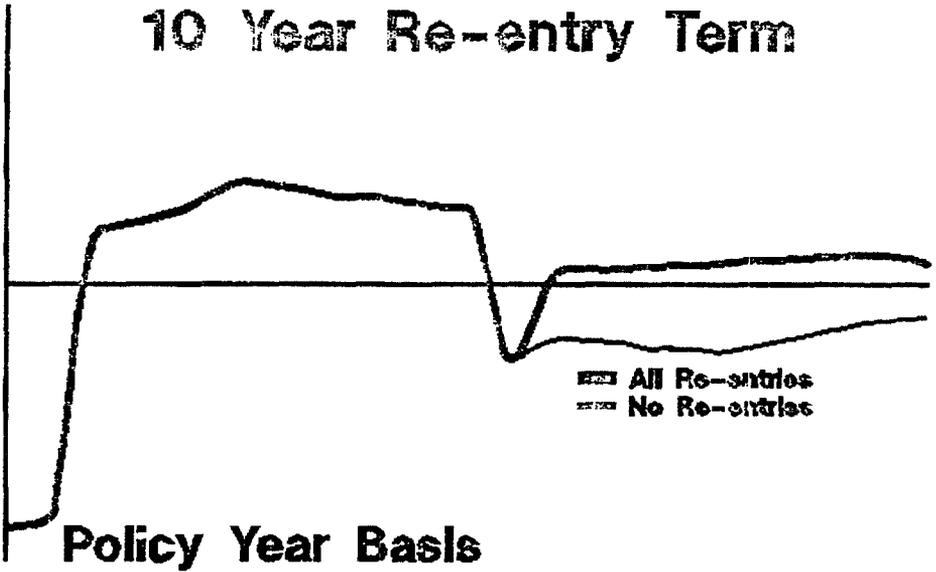
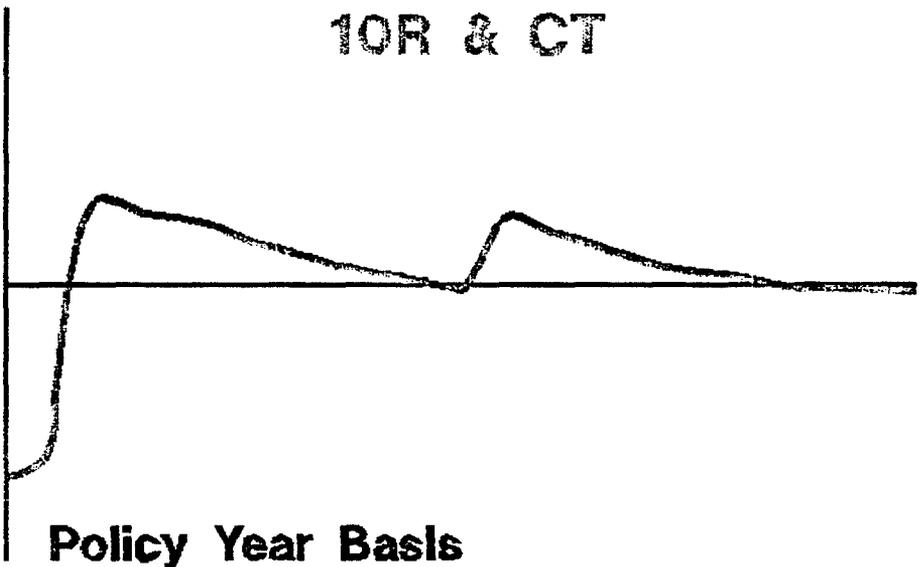


Figure 3

Generalized Cash Flow 10R & CT



MR. DOBSON: My presentation is on specific cash flow considerations involved in group products and HMO's. I could have started the same way as Denise did, I suppose. It's not something that you think about a lot. In my experience with Blue Cross, it made quite a lot of difference, however, and was material to our bottom line, because the margins in the group area are so low. When I was thinking about the subject, it occurred to me that the key question on group products is how much money should we have and how should we invest it? So I looked at it from that standpoint and started with a balance sheet analysis. In the aggregate, we figured out that we needed to have our surplus invested, obviously, minus whatever we had in our building or any other fixed assets that weren't invested, plus the float from the business. So, the key was trying to figure out what the float from the business should be. Of course, we assumed and wanted it to be positive.

On any kind of true administrative services only (ASO) product, the float is going to be zero, so we ignored that. We had a fair amount of business that I'll call claims reimbursement. By that I mean we paid the claims and then after the fact the account reimbursed us for the cost of the claims plus our expenses. This was a difficult area because the cash flow can be negative. If you have a negative cash flow, then you technically need some sort of interest charge, which may be part of the retention or a separate specified interest charge. Alternatively, you may need to get an advance deposit, which we found was not very easy in a lot of cases. The problem arises from payment of claims in one month and payment reimbursed by the account in the next month. You can assume that the average claim payment date would be in the middle of the month. It would take a couple of weeks perhaps to prepare the bill and then reimbursements might be received at the end of the next month. Following this scenario, there would be a 45-day lag from the date of payment of the average claim to reimbursement by the account.

Therefore, if there is no float on ASO business and if the float on claims reimbursement accounts can actually be negative, the only place we can get any positive float is in the experience rated group lines. The float there, of course, would be the claim liability plus any experience rating reserves minus any receivables, if accounts are not paying on a timely basis, and plus or minus the current period gains or losses.

We actually went through this and, in the aggregate, we had roughly \$100 million of surplus. The building was worth about \$10 million, so we deducted that. We had roughly \$100 million claim reserve, the experience rating reserve was around \$5 million, advances from claims reimbursement accounts was another \$30 million, and total receivables were \$80 million. So our net invested assets should have been \$145 million. We knew we did not have that much at the time.

At the beginning of 1982, we were in a fairly positive position with a little less than \$30 million of positive float from the business (cash and investments less surplus). But by the end of 1983, it had dropped down alarmingly and actually went negative in a month or two in early 1983.

Since everything was in short term funds, so we tried to get our cash into the investment portfolio as quickly as possible. The first step that we took was cash management. We had Dave Johnson come in and do an analysis. A couple of the things that he described in his talk were things that we were doing wrong. The second step, since we noticed there was a problem

with the receivables, was to create a collection unit. You might think it strange that we had not done anything like that before. In fact, it was very successful. Dealing with the accounts was not the problem we feared it would be. Apparently they just thought, well if they're not going to press us why not take advantage of it? They were one or two months in arrears. Once we started making an issue of it they responded pretty well.

Those two interventions made a big difference in terms of how much we had invested--about a \$40 million difference. The investment earnings on this amount was quite significant in terms of our bottom line.

Turning to the HMO area, the basic question that I am raising is, "Have HMO's become cash cows?" Certainly my experience with HMO's is that they have been a cash drain on the parent organization. But I think that the tone is changing. One of the reasons that the tone is changing is that in many instances HMO premiums are actually lower than the premiums of the competing plans. It's always been true that the rates in relationship to the benefits provided were pretty close to the competition, but I'm talking here about the absolute level of rates. It is quite startling if an HMO rate actually comes in lower than the competition, but that seems to be happening frequently now. Perhaps even more important, HMO's are now making money.

There has been tremendous growth in the area. There are many large chains, that you're probably aware of, that are getting into more and more areas of the country. Blue Cross plans are very active in starting HMO's. Some hospital chains are starting HMO's, and, of course, some HMO's have gone public and have been very successful in doing so. The investment community is very interested, I believe, in HMO's at this point.

But, of course, any HMO does have a cash drain. This occurs until the enrollment hits the break-even level. You price into the premium fixed overhead and you assume that it is going to be spread over a certain number of enrollees. Then, until you hit that point, there's going to be a cash drain. Any new HMO is going to have this cash drain in the area of start-up costs and in the area of administrative expenses. Any staff model HMO or an HMO being built around a new medical group rather than an existing medical group is going to have facility and equipment expenses, which can be quite substantial, and they're going to have some excess physician capacity for a time until the enrollment builds up. So all this involves initial cash drain from the HMO standpoint.

Now, ultimately, in general, a staff model HMO can produce greater profits as a percentage of revenue than an IPA can. However, in terms of return on investment, because of the heavy initial investment required in the staff model, the IPA tends to look better.

I've covered this very briefly, but I do want to go back and emphasize two important points. First, on the group side, cash management is not immaterial. At Blue Cross and Blue Shield of Alabama, it made about a forty million dollar difference in what we had invested. If you assume a fairly conservative annual earnings rate, today, of about 10%, that was \$4 million. That was definitely material in relation to our bottom line and in relation to the kind of margins that exist on group business right now. Secondly, I believe HMO's are rapidly becoming investors rather than investments. They're going to have money to be invested. If a company owns an HMO, there may well be funds coming out of an HMO rather than just going in to it.

MR. GRAHAM MCDONALD: I have a question for Dave. In dealing with banks we sometimes feel we're up against a stone wall trying to convince them that charges they're making to us really belong to the policyowner. I'm thinking of such things as returned check items. Do you have any suggestions, from the standpoint of negotiating, as far as how you convince them the charges they're trying to levy on us are really charges that should be levied on the customer?

MR. JOHNSON: That is a touchy one because their response is more than likely going to be we charge you and you are welcome to bill that back to your policyholder but you're the one who's handling the account. You are talking about checks you deposited that bounced?

MR. MCDONALD: Yes, these were customer checks that bounced and the customer is getting charged \$7 to \$8, anyway, yet they want to charge us another 50 cents on top of that. They're trying to say that their expenses are so worked up that this is the cost to us and the \$8 is the charge to the policyowner.

MR. JOHNSON: I would probably side with the bank there. I would say that would be something you might have to bill back to the policyholder. To the bank, it is a cost of handling your account, even though the cause is not you. They really don't have any other banking mechanism. The check may be drawn on First National of Denver, deposited at Zions First National in Salt Lake. There's no way they can actually bill or charge a customer who banks at some other institution. So they don't have the mechanism.

MR. MCDONALD: Another item, in the same regard, when you're dealing with the banks. I can understand on labor intensive kind of items how the cost keeps escalating each year, but as they're getting more automated, like preauthorized payments, they're transferring back and forth on a pretty automated basis. We find that they start by negotiating and saying they want an extra 50% this year and you negotiate them down to a 10% increase. Any suggestions on that, other than trying to be hard-nosed with them?

MR. JOHNSON: Well, hard-nosed may be the best way. I think what you run into, and I don't know how you want to point this out, is that banks have been notoriously poor at tracking their own costs. Much of what's happening is as they become more sophisticated in the area of product costing, they discover there are more costs they've been incurring all along. So perhaps one thrust would be to break out how much would be an increase in cost and how much would be what is now just discovered that it costs them. Perhaps agree to spread your share of that discovery over time since your original arrangement was based on assuming they have included all their costs. I don't know if that helps any.

MR. MCDONALD: That's a good point. I have one other question for Mr. Dobson. On the group business, I understand that you improved the accounts receivables significantly. I know I did in our case. We were zeroing in to have the bill out to the policyowner by the due date. We get the bill out to the policyholder two weeks in advance of the due date to give them at least time to try to get the payment before the due date. We are also considering starting to charge overdue interest from the dates of the due date. Have you built that into your system as well to improve your cash flow?

MR. DOBSON: Some of the larger contracts did have an interest charge, but that was not very common. As far as preparing the bill earlier and getting it out, we have not done that, but that sounds like it would be a good idea. In general, the field representatives did not want to be involved in the collection process. They wanted it to come from the home office.

MR. MCDONALD: We felt on the interest side there would be a problem on existing contracts to introduce that term. Did you have any problems on the existing large contracts getting the interest charge in?

MR. DOBSON: We really haven't tried to put it in on a routine basis on new contracts. That sounds like the best way to do it.

I have a question I'd like to ask Dave. There is one thing that concerned me, even when we went through the process. I understand how from any one client's standpoint they would be trying to maximize their cash flow from both ends, from receipts and disbursements. What happens when two of these individuals meet up against each other?

MR. JOHNSON: They both win. The ultimate, I suppose, would be that the payment system would be such that everything would be immediate and that would mean that the people who are most aggressive now would be the losers and the people who are least aggressive now would be the winners. So, the battleplace is between now and when we go to the immediate payment system. We do find situations where someone uses controlled disbursement on one end and a lockbox on the other end. In terms of the float advantage there's a bit of an offset there. It becomes an issue of predictability and control. So that really means the target is to do everything you can to maximize, have control and fully utilize what you have and then, even though you may lose some of the float advantages when someone else uses cash management techniques, you are at least able to position yourself best to respond to that.

MR. DOBSON: Okay, I can see that the control would be important. But couldn't you have a situation where both sides were spending more money than they had been previously, but because of what they were doing they were neutralizing it and just incurring additional expense with no advantage to either side?

MR. JOHNSON: That could happen. I have not seen that happen, but it could. Usually you have a variety of people and if every one in the system were doing this, then yes, you'd have that, but typically not enough of the players are doing it to make the offset.

MR. VICTOR PACUIA: You mentioned something about trying to improve your cash flow and you set up a collection unit. Could you give us more specifics as to what kinds of things you did to try to improve the collection of delinquencies?

MR. DOBSON: Yes. That area had been ignored for a long time. The initial thrust was just making telephone contacts from that area to the groups that tended to come in delinquent and just asking them if they could send it in more on time. We didn't even have to get to the point of threatening to put in an interest charge. I think that was intended if anyone did not respond to the first request. But from the short experience with it while I was still there, just making telephone contacts was very successful. I think

we had some where there was some disputed amounts that had built up over a period of time where we had to take some harsher tactics. In fact, one case was a hospital group that had cancelled some time ago and left an unpaid amount. We ultimately had to take it out of a disbursement to that hospital. We had to deduct it from some money we owed them under our regular business. But we didn't do anything as far as collection agencies with existing or on-going policyholders. It hadn't been necessary at the time I left.

I'd like to ask a question of Denise. You mentioned a lot of things in relation to reinsurance. In your experience are the reinsurers looking at cash flow and taking that into account in their pricing, is this an area that's going to become increasingly important, or will there be no change? What are your predictions?

MS. FAGERBERG: That's hard, but at Occidental we did look at cash flow. When we priced a product though, we didn't do any specific things in our projection. Everything ended up in the same pot as far as cash flow for the company was concerned. I talked to other reinsurers and I think that was basically what was happening for them. Everything is one big corporate pot. There's not a reinsurance pot. But reinsurers in general are tightening up on their pricing. I think they're watching their assumptions more and they're watching what can happen to your cash flow out in the later years. It can make a big difference on your cash flow if you're quoting 45% allowances in the 20th year versus 15%, and it's not usually necessary to get aggressive that far out.

MS. THEA CARDAMONE: I have a question for Mr. Johnson. It was just a clarification, really, of the zero balance account versus the controlled disbursement. How do they differ?

MR. JOHNSON: That's a good question. With the zero balance account, the idea is that the account starts with a zero balance at the beginning of the day. It's a regular checking account. During the course of business, checks are presented against that account. At the end of the business day, a transfer is made from a master account to fund it precisely so it leaves the account with a zero balance. However, the master account has to have sufficient funds in it to fund each of the zero balance subsidiary accounts. And there's no way of predicting precisely what that will be, so that becomes a bit of an estimate. With the controlled disbursement account, the first thing in the morning, the checks that are going to be presented that day are processed and at that time the funding is determined and deposited. And that's all that's going to clear the account that day. So it's a first thing in the morning transfer versus end of the day.

MS. FAGERBERG: Could you explain a little bit more about the controlled disbursement. You said you had to go to a bank outside the Federal Reserve?

MR. JOHNSON: Yes. In overview terms, it has to do with how checks are cleared. Banks that are in a Federal Reserve city must accept checks up until 11:00 a.m. or noon, whatever the deadline is at the particular Federal Reserve city. Being in major cities, they will have checks presented throughout the day from a variety of sources, so there's no way to tally what the total presentments are for the day until the close of business. This is the zero balance account, the tally made at the close of business. However, with a controlled disbursement bank located outside of the Federal Reserve district, the only way checks are cleared against accounts in that bank are across the

counter--and no one goes to Fabens, Texas--or from the Federal Reserve first thing in the morning. At that point, no other check presentments are going to be made throughout the day as they would in a Federal Reserve city bank. Predictability is then preserved.

MR. DARRELL KNAPP: This is for Bob, or maybe Mr. Johnson. Suppose you've got a claim reimbursement system where you've got a negative float. What sort of documents, or whatever, are you using to protect the insurance company from the insured running off in a negative float position?

MR. DOBSON: The main thing we did was to try to get advance deposits. I think we were pretty successful in always requiring an advance deposit when a group was set up. The difficulty was in increasing the advance deposit as the account grew with inflation, or whatever. So in many cases the advance deposit would become inadequate. On some of the larger, more credit-worthy, accounts we had interest charges and really had no protection as far as them leaving. On the other ones, it was the advance deposit, to whatever extent that would be satisfactory.