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MANAGING THE ADEQUACY OF CAPITAL

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MR. GREGORY S. JACOBS: Our first speaker will be Dick Robertson who is executive vice president and chief financial officer at Lincoln National Life Insurance Company. He will be followed by Rob Smithen, senior vice president and chief financial officer of Manulife. Our final presenter will be Dan McCarthy, a consulting actuary with Milliman & Robertson in New York.

MR. RICHARD S. ROBERTSON: For about 15 years, my company, Lincoln National Life Insurance Company, has been using a series of risk-based capital formulas as a tool in managing our surplus and in managing the way we allocate surplus among our operating units. After we had been doing so for a few years, I published a paper describing our formula, why we developed it, some of the background as to how we did, and how we used it. The paper also discussed how formulas might be used in broader contexts, including the regulatory context. My reasons for publishing the paper were mainly because I believed that the profession needed to give the subject more attention, that life insurance companies did not have enough information or theory to judge what type of leveraging was appropriate, and it would be desirable to

begin to introduce some ideas that people could argue with, could use to build on so that we could begin to develop better skills as actuaries in evaluating the kinds of risks we deal with in the life insurance environment. I think in retrospect it's turned out quite well. The process has developed not a whole lot differently than I thought it might when I first published the paper. In particular, I am not at all surprised that we are at the point now where regulators are using, are asking for, and have developed a formula that they are using as a tool in managing insurance companies, and I think it's a very healthy development.

The last two or three years have been very active years from the perspective of surplus management. Three or four years ago, our customers were much more interested in price than security. They were not willing to pay significant amounts for companies that had low leverage. And as such, the kinds of surplus standards that we were using at that time were based on an environment that made appropriate a much higher degree of leverage than is appropriate today. Today our customers are very interested in security. They want to deal with companies that have low degrees of leverage and that have favorable ratings, and they're willing to pay for that kind of security. Under those circumstances, we have been reevaluating the surplus targets that we have been striving for. I would say as a general rule that any target that was appropriate for four years ago is no longer appropriate today. Higher surplus targets are desirable and needed.

During this same period of time, the rating agencies, particularly Moody's and Standard & Poor's, have basically downgraded the entire industry. I believe that those two organizations have been totally irresponsible in the way they have been performing the last two years. They have not maintained consistency of rating over time. Because of their actions, the public believes that the life insurance industry is more risky, more highly leveraged today than it was four or five years ago. That is completely false. In fact, the reverse is true. We are a much stronger industry today than we were four or five years ago, and if consistent rating standards were applied over this period of time, companies would be receiving upgrades in substantial quantity rather than downgrades. I also do not believe the quality of the current ratings is better than it was two years ago. That is, I do not think that the rating agencies have learned from their experience the last two years. Here I should qualify that I'm talking about the two I mentioned. I think on the other hand, an organization like this is much better today than it was a few years ago. I think it has improved considerably in its skill at differentiating and appropriately ranking companies.

The main thing I want to talk about though is the issue of how we, as surplus managers, as risk managers, should react to the introduction of regulatory standards with regard to risk-based capital. To what extent should the formula that is being developed influence the way we perform as companies? A lot of discussion took place in the earlier session on Evaluating the Adequacy of Capital about the inappropriateness of using capital ratios based on the current formula as a method for ranking company security. I didn't hear a lot of detailed discussions as to exactly why that's the case, other than the very practical reasons, but I think that the reason why it is inappropriate is something like this. The formula is a good formula. It's far better than anything that has been used in the public domain in the past. Many of its limitations result from the fact that it must be completely objective and it must use completely objective information, generally publicly available information. That puts a

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lot of constraints on it, but it does a pretty good job of evaluating the exposure of companies to a fairly significant list of risks to which we are exposed.

Some parts of the formula work better than others. I think the C-1 parts of the formula are quite good. The C-3 is much more complicated, much more difficult to evaluate. Without really getting into a company's cash-flow projections and testing, one cannot really come up with a good measure of how exposed a company is to C-3 risks. But given the constraints under which it operates, the formula does as good a job as perhaps might be possible.

There are many risks that the formula either does not measure at all or does not measure well. Now for a company whose surplus level is somewhere near the 100% level that the formula is targeting, perhaps it does a pretty good job of sorting out the good from the bad. But once you get up to a certain level, and I don't know whether that level is 110%, or 120%, or 150%, but somewhere above the minimum level, the risk of a company failing because of the kinds of things that the surplus formula is designed to measure is very, very small. The differences in risk exposure of companies will come from those things the formula does not measure. Thus, it is entirely possible for a company with a 200% ratio to be in a less secure position than a company with a 130% ratio. The example that kept being tossed around was 200% and 100%. I'm not sure I want to generalize that far, but I think once you get above a certain level, it is indeed theoretically inappropriate to use the formula as a way of making distinctions between the risk security of companies. The things that will make a difference are the things that the formula does not measure.

The rating agencies will have an interesting challenge as to how they use the formula. I would expect that the rating agencies will use the company's ratio of surplus to target surplus on the formula as one of the tools they have for evaluating security. And indeed it has to be, because a company that is below the 100% level clearly has some very serious strategic management issues, it has to deal with. Even if the formula itself were not an accurate measure of surplus, the companies would be subject to regulatory supervision, and companies that are near the 100% level are subject to the risk of falling below the 100% level. I would hope that the rating agencies won't do what we were cautioning about and try to make distinctions between well-kept capitalized companies based on that ratio. I don't think they will. In a sense they can't, because if a rating agency were to take the position that this is the primary factor that distinguishes between the rate capabilities of companies, it wouldn't have anything to do. It would have no mission. I think their own self-interest is going to be to focus their energy on identifying the things that the formula does not measure and on identifying differences in rate characteristics that go beyond the things that are covered by the risk-based capital formula. They may indeed develop amplifications on the formula of their own, although I think historically the formulas they currently use are very, very poor, and the NAIC formula will be a quantum improvement for all of the agencies.

The question now is to what extent a company should manage affairs so as to improve its measure by the NAIC formula. I would divide companies into three groups. Companies that are below the minimum clearly have as their number one priority correcting that situation. The NAIC proposal talks about a phasing-in of the requirements. It has not anticipated lowering the boom the day after the statements

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come in, but it's a practical matter. Companies that are below the level will be under immediate and critical pressure to fix that in a hurry. No matter what happens, that will become public information very quickly, and those companies will be in a very difficult position to try to sell life insurance in that environment. So clearly the first group of companies are those where correcting the surplus situation must be the number one priority.

The second group of companies would be those that are above the minimum, but not comfortably above. Again I can't tell you where you draw the line between the companies that are and are not comfortably above the limit, but these are companies that will need to continually be concerned that adverse conditions might push them below the limit. Perhaps even more seriously, their customers, their agents, and the rating agencies, will all be looking over their shoulders to determine if adverse activity or developments would push the company below the level. So these companies also will be under severe pressure to improve their situation, but they may have a little bit more time than the companies in the first category.

The third group of companies includes the companies that are comfortably above the minimum. I think we all recognize that it is inappropriate to make judgments of these companies based on relative ratios in the formula. The key issue for these companies ought to be to manage their affairs so as to keep them out of the first and second groups. The proper strategy for management of these companies' surplus may well be to analyze all the things that could happen to the company that would move them significantly closer to the line and to develop a surplus cushion so as to protect them against such activity.

In other words, I think we will continue to have target surplus formulas for our company that will look much like the present formula, I think our current level of target surplus will continue to be appropriate; it is comfortably above the line. We will probably make some adjustments so as to reduce discrepancies between the formula we use as a company and the NAIC formula. For example, it seems to me that we ought to use the same asset classifications to the extent we can to simplify matters. I would also be concerned if there were a particular class of business where the element of our formula that applied to that business was lower than the NAIC formula or maybe only a little bit higher because of the implications that a major shift in business might cause with respect to our overall equity position. But beyond that, I think the primary focus of our surplus management should be to keep us comfortably above the minimum level.

The next issue I want to discuss involves what companies can do to manage their surplus level relative to the NAIC formula. The formula is by no means perfect; it is arbitrary in many respects. It doesn't cover all the risks by any means, and there are and always will be opportunities for companies to take advantage of limitations of the formula, to game the formula if you will. Some companies have done that with respect to existing valuation rules often to their detriment, and I'm sure we will find that companies will look for opportunities to take advantage of things that weren't anticipated when the formula was developed. As you might expect, my recommendation is that companies strenuously avoid the use of mickey mouse techniques to manage their surplus position. There are a number of professional and practical reasons for this recommendation. From a practical perspective, we are going to have

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all kinds of organizations looking for that kind of thing, including the rating agencies, the regulators, and the public in general. Companies are going to get caught, and there's going to be far more damage done to companies identified as abusing the system than if they simply managed their affairs properly in the first place. Perhaps even more importantly, there's the professional matter that our job and the company's job as fiduciaries should be to manage the affairs so as to provide the degree of protection desired for policyholders and to realistically communicate what it's doing to the public at large. So I urge companies to put away the mickey mouse ears.

What can companies do to manage their surplus positions? Well, I'm sure that's going to get a lot of attention over the next few months and probably over the next few years, and I can only give a sample of ideas that the companies will be looking at. Clearly one of the quickest things that can be done would be to improve the posture of the investment portfolio, particularly the extended company may have liquidity in the portfolio. Improving the quality, reducing the exposure to junk bonds, reducing the exposure to mortgages to the extent companies can find markets for mortgages, all of these things can have the favorable effect of reducing the amount of required surplus companies would need and therefore improve their positions. I'm sure companies will do that. There will also be companies that will do all they can to realize capital gains while keeping the capital losses on their books. That comes fairly close to the mickey mouse area, but even worse, it's very wasteful, because it will trigger capital gains taxes without improving the financial condition of the company.

As for things that can be done on the liability side, some of them will take longer as companies can critically examine the nature of the products that are being sold and build into those products features that will reduce the exposure, reduce the requirements of the formula, and thereby improve the leverage. For example, putting a surrender charge in a deferred annuity would reduce the surplus required for that product by half. Incidentally, that does identify one way to game the formula. The formula does not say how big a surrender charge is required, and I imagine there will be companies that will have 1% or 0.5% expense charges in there for no other reason than to reduce the surplus requirements for the products. I expect that a reinsurance market will be developed that is designed to shed capacity or to spread business around to companies that have capacity. Here there are a number of ways to do it, some good and some bad.

Reinsurers will provide whatever kind of coverage companies want to buy; I think I can speak with some authority on that. They will charge according to the amount of risk the reinsurer is being asked to assume. It is entirely possible to design a reinsurance agreement that would shed the premium without shedding the risk or shed the assets without shedding the risk. And if the formula doesn't apply to that business without adjustment, it will give the appearance that the company's financial strength has improved, whereas in reality it has not. That is an example of the kind of thing that I would put in the mickey mouse category, and I think it is the kind of thing that will be identified in the long run to be counterproductive. On the other hand, it is possible to reinsure business where the reinsurer shares equally in the risks of the business with the company that's writing the business. In that case, I believe it is entirely appropriate that the company reduce its risk requirements proportionately. One of the challenges will be to help the uninformed public distinguish between those

two types of risk, especially when any given transaction will probably be somewhere between the extremes.

In the final analysis, the only way a company can improve its risk position in the long term is to either raise more capital or earn more capital. Stock companies can, of course, sell more stock, or in many cases can leverage at the holding company by incurring debt, paying that debt as capital contributions into the operating company, and thereby improve the financial strength of the operating company itself. As was pointed out, the rating agencies will look at the degree of leverage of the parent, recognizing that a highly-leveraged parent will put very severe capital demands on the operating company, and that's appropriate. Even in the case of the stock company, people are not going to buy the stock or loan money and investors are not going to put money into an organization unless they have a very high prospect of getting it out with a proper return. So in that respect, a stock company does not differ from a mutual company. In the long run, the only way to develop capital is to earn it. I believe that the introduction of the risk-based capital will be a factor that will put favorable pressure on the margins of our business. I think our customers want more security, and they're willing to pay for it. I think it's one of our responsibilities as company management to build that additional equity for them.

MR. ROBERT M. SMITHEN: I'm going to follow on from what Dick had to say and go into a little more detail about how Manulife manages its capital position. Before I get into our capital management, I will outline the regulatory environment in Canada and talk a bit about risk-based capital in Canada. First, I will define capital because it's not a term that's intuitive, and it's not perhaps clear to all actuaries what capital is; sometimes debt and capital are confused. I will also talk about what makes a capital management policy, and then I will talk about how Manulife is, in fact, utilizing those criteria to develop its own policy.

It's important that you get some perspective on my company, because I'm going to be talking about it specifically. We are a large Canadian company with \$34-35 billion in assets, so we are subject to Canadian regulatory standards. Most of our business is done outside Canada – in the U.S., in the U.K., and in six territories in Pacific Asia. We are subject to regulation of Canada on a worldwide basis, in addition to being subject to all the regulations of each of the territories we operate in. As well as operating in these different territories, we also have different kinds of businesses. We do all the kinds of life businesses you'd expect and money businesses in these various territories, plus we own five trust companies that are akin to U.S. savings and loans. We also own a bank in the U.K., a piece of a mutual fund operation, and a piece of a real estate brokerage company. We have a large reinsurance operation and all sorts of exotica there, so capital management is a complex problem in a company as complicated as ours. I know many of your companies don't have quite the complexity, but many of you do have multiple lines of business, so when I talk about the kinds of problems we're facing, I hope you'll be able to recognize the same kinds of problems in your own shops.

To say that the external environment is undergoing change in Canada is the understatement of the century. We have a new financial services act in Canada that came into effect on June 1, 1992. Under that act, effectively all the financial institutions – banks, Canadian trust companies, and life insurance companies – basically can do

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each other's business. We all can own each other; everybody can sell everybody else's products. The banks have some restriction on retailing insurance through their branches, but they will get around that eventually, and basically everybody's in everybody else's business.

For the life insurance companies, we have a lot more freedom. We will operate under "prudent man" investment rules rather than specific rules. We can do commercial lending and things we haven't been able to do before. Mutual companies can now demutualize. They haven't been able to do that in the past. Mutual companies interestingly enough can raise capital, not in the form of common equity, but in the form of preferred shares and subordinated debt. So we can now go to the markets, if there's a market that wants us, and that's a serious question. The role of the appointed actuary has been enhanced tremendously in the legislation; we're the safeguards of the financial condition of the company. It's up to us to not only report on the financial condition, but if things are being done imprudently by senior management, we report on it to them, to our boards, and to the regulator in the Office of the Superintendent of Financial Institutions (OSFI). There's a tremendous amount of responsibility on the appointed actuaries in Canada to do everything they can to ensure that financial decisions are good ones.

While all this is going on, we've changed the entire basis of financial reporting in Canada to a GAAP basis. The key change there is in the reserve methodology in Canada. We're now on what's called a policy premium reserve method, which is analogous to a gross premium reserve, where the assumptions, often pricing assumptions, are the best estimate with a margin to cover adverse deviation. The margins are governed according to technique papers coming out from our professional body, the CIA, and are subject to peer review by the CIA as well.

The OSFI regulators said all this was okay, provided certain things happened. One condition dealt with peer review, technique papers, and professional standards. Second was the development of minimum continuing capital and surplus requirements (MCCSR) in Canada. (That's U.S. risk-based capital.) Also, in Canada, as of this year, the appointed actuaries have to report to the boards and to managements on the financial conditions of the companies today and for the next five years under their best-estimate assumptions of the future and under ten certain prescribed scenarios. Most of these scenarios are adverse scenarios – shocking changes to interest rates, mortality, etc. It's a busy time and a very important time. We're learning much about the financial conditions of our companies. In the end, I think it will strengthen the financial position of our companies. However, it's not easy.

Just what are the MCCSR rules in Canada? Basically the concept is identical to what Cande Olsen talked about at an earlier session for the U.S. There's available capital, and there's required capital. The required capital is a function of the C-1, C-2, and C-3 mortality and morbidity components. There's no C-4 component in Canada. Also, there's no formula that links them together; we just add them all up. I should say I really congratulate the U.S. committee that developed the formula. I think there's a stronger theoretical base behind the U.S. formula than the Canadian one. The Canadian formulas were largely done by "gut feel." They were developed by actuaries, of whom I was one, but there was a lot of subjectivity in them. Now they've been in place for a few years and seem to be standing up, but they are

different than the U.S. factors. I think in some areas we've done a little bit better than the U.S., perhaps. We thought through some of the problems that were mentioned, and we've incorporated many of those into our formula already.

The definition of available capital is quite complicated in Canada and includes things that would not count as capital in the United States. We start from a base of our surplus account and add in all the capital elements that you could raise externally such as common equity, preferreds, and subordinated debt. Because of the unique way we account for capital gains in Canada, we add in 100% of the realized gains on stock and real estate. These gains count as capital to the extent that they haven't been amortized in our financial statements. A portion of the unrealized gains on stock also counts as capital. So when you get into capital management techniques in Canada, realizing gains on stock and real estate is a very big issue. Also, there are reductions to capital, notably to the extent that there are negative reserves or cash value deficiencies; 100% of the former and 50% of the latter reduce available capital.

There is a formula in place for use by the industry guaranty fund association, CompCorp, which is operated by the Canadian Life and Health Insurance Association (CLHIA), a counterpart to the U.S. ACLI. The MCCR formula is employed; however, the regulators have not yet adopted that formula, and there is no regulatory formula yet in place. There will be a regulatory formula by the end of 1992, and we expect it to be very similar to the one currently in place for use with CompCorp.

Some of the key issues under dispute may be issues for the U.S. as well, particularly the very, very complex issue of the treatment of subsidiaries. It's one thing to treat life insurance subsidiaries on a consolidated basis, which we both do, but how do you treat nonlife insurance subsidiaries? Most importantly, how do you handle goodwill? Is goodwill an asset? Does it count or doesn't it? It won't very likely count in Canada, but it's a big issue for a company with subsidiaries. The most obvious factor to question in the C-1 right now is mortgages.

What is capital? It may seem obvious. For those of you who have taken finance courses, you know capital has to have one of the following characteristics: It has to be permanent, it has to have freedom from mandatory fixed earnings charges, and/or it has to have a subordinated legal position to policyholders or creditors. So if you look at common equity, it's got all of those. Because of that, in Canada, it's called tier-1 capital, and it has a little higher ranking in terms of availability of usage than certain other pieces of capital that only have one of these characteristics. A balance sheet shows assets and liabilities. On the right side, ranked in terms of who gets what when, the liabilities (including annuity liabilities that some may not call liabilities) are ranked first. If a company gets into financial trouble, those policyholders will get first call on the money. Then you get into debt that is not capital. These are just general obligations of the company -- commercial paper and certain term debt that does not count as capital.

In Canada, we have two kinds of capital -- tier-1 and tier-2. For those of you who are used to banks, the international rules for banks outline tier-1 and tier-2 capital. Canada has utilized those definitions for available capital uses for all its financial institutions. Tier-1 capital has all the elements of permanence, subordination of rights, etc., so common shares and surplus are tier-1 capital. Subordinated debt and certain

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preferred shares are tier-2 capital. This is important in our environment, because there are restrictions as to the amount of tier-2 capital you can have in addition to tier-1 capital.

Next, I'd like to talk about what's happening regarding capital management at Manulife. Interestingly enough, we haven't had a capital management policy in place anytime in our history of nearly 110 years. We're putting one in place now. What we have had is a lot of emphasis on earnings and, of course, earnings are certainly interrelated with capital. However, they're not identical. It is important not just to manage earnings but to manage capital.

At Manulife, we've essentially managed earnings and, consequently, at least to some degree, we have managed capital in three ways. First, we've spent a lot of time trying to cull out pieces of business that weren't core to our operation. Historically, we've operated internationally, and we've been selling off pieces of our international operation that aren't critical to us. We've gotten out of certain lines of business that are ancillary to us, and we've done it in a way that's been, I think, constructive for our policyholders and fairly easy so far. So, number one is to get out of businesses you don't want to be in.

Number two is to strong, central financial targets – with teeth if they're not met. The corporate office has gotten quite tough on our operating division in terms of meeting the assumptions they build into their pricing. Many years ago, we set pricing targets for all our operating divisions. There are two targets for each product we sell. One is a return on investment measure. The other measure is a premium margin, or an interest margin measure. We are insisting, since our operating divisions have essentially total leeway in setting the assumptions they price for, that they meet those assumptions. We've given them a little time to get on side, but the theory is clearly that if you meet your assumptions on your new business over time, your earnings will be fine and you'll replenish your capital. We view that as a very critical earnings management, consequently a capital management, technique.

Number three is something many have done, and I guess it's a function of the first. We've been very careful in terms of managing our surplus strain, not only by getting out of certain businesses, but also by stressing those lines of business that appear to us to give the best return. Now I say that on the one hand, and on the other hand, we have not been very good at slowing down growth in territories. We haven't made decisions about allowing some to grow faster than others. We said basically that everybody has to meet minimum targets. You meet those minimum targets, you'll get your capital.

We now find that isn't good enough. We have to go further. We have decided that we need a capital management policy. It's not good enough to just talk about those elements I just mentioned. So we started thinking about this last year and tried to decide what a capital management policy is. First of all, you have to define what capital measure you're going to use. Once you have your measure, you have to set a target. What target is appropriate? Everybody thinks if you use a risk-based capital, 100% isn't right. Is 200% right? Who knows? Once you get your target for the total company, how do you go about allocating it to the operating business units inside the company, or do you? Then, how do you set targets for them, and

how do you make sure that the sum of the parts add up to the whole and things don't fall through the cracks? It's all got to be controlled, or you're going to do something wrong. Then you have the question of whether you should go to the outside markets. Next, how do you measure this beast once you have it defined?

In terms of what capital measures are appropriate, you can use your statutory assets less liabilities, and you can use GAAP, and remember in Canada they're essentially the same. You can go to a more sophisticated measure called a net worth measure, which takes an adjusted statutory capital and adds the present value of future profits on your inforce business. It may or may not add the present value of future profits on new business as well. Then, of course, there are all the risk-based capital measures. Canada has the MCCSR; the U.S. has the NAIC measure. The rating agencies have their own measures, and some companies have developed their own internal measures.

Let's look at some of the strengths and weaknesses of the various measures – statutory, net worth, and risk-based capital. I group statutory and GAAP measures together, because it's easy for me to do that being a Canadian. I think one of the biggest things that can't be overlooked in using a statutory measure is the fact that it's very controlled. It's audited. Probably inside your company there are control systems that are well regarded. You probably produce these statements quarterly, and you're pretty comfortable with and confident in the results. I think that's a key strength of a statutory measure. Obviously though, the biggest weakness is that you can do the wrong thing very easily if you just manage capital based on statutory measures. You won't let businesses with high returns grow if you just optimize your statutory capital. The obvious way to optimize capital is to stop growth. Also, a statutory reserve is not risk-based.

Net worth measures get rid of the problem of making wrong decisions, short-term versus long-term decisions, because they do take into account the present value of future profits on the decisions you're making now. The problem with net worth measures is that they're tremendously complicated to understand, and given that everything is measured so far out in the future, they're tremendously assumption driven. I remain a skeptic about those measures. Although, they're becoming quite common in Britain.

Then there are the risk-based measures. Obviously they're very important measures, and today it is pretty hard for anybody to ignore a risk-based capital measure, given what's happened in the regulatory environment. Do so at your own peril.

The recommendations we at Manulife came up with after much thought and much discussion with our senior management team is that one measure wasn't enough. We felt we needed two. Typical of the complexity of actuaries, I guess we decided to come up with two. We do believe that the published financial statements are important. Consequently, the capital that you actually show in your statements is a governing measure of your strength. It's visible, and also it's the real determinant of your solvency. So at Manulife, we're looking at the statutory measure of capital, which is the GAAP measure of capital for us, as well as looking at using a risk-based capital measure. We've decided we want to manage both of those measures. We've decided to use the risk-based capital measure for the same reasons Dick

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mentioned. It's easier to use the same measure as regulators use, and our regulator is going to use an MCCR measure. We intend to use MCCR, and I have no doubt the rating agencies will start adopting that measure when they look at Canadian companies. So, we're using the same MCCR measure as used by the regulators in Canada once defined.

That's where we are in terms of how to define what capital we want. We then went to the next question and asked ourselves, how much do we need? This is a real tough one. For any company, this is a company-dependent decision. There's no answer for everybody. It depends totally on your internal strategy. It's impacted by many things. For example, if you want to operate today in GIC markets, be a strong reinsurer or a big structured settlement writer, or in the upper end of the markets on the individual insurance, you had better have a high rating. If you want a high rating, you had better have a fair bit of capital. So your marketing is not an irrelevancy. If you, as we do, want to be able to take advantage of opportunities and become a more broad-based financial services company, and you aren't satisfied with just being a one-line life insurance company, you need capital. You've got to have a strong ratio for that.

You can get into the arguments on mutual company versus stock company, as to which one needs more capital. You could easily argue that a mutual company needs more capital because it, at least the American mutual, can't raise external capital. Therefore, a mutual company has to have more internally developed capital than a stock company. On the other hand, your policyholders might argue that you're not being forthcoming at distributing your earnings if you have too much. That's a dilemma with a mutual. A company must have an appetite for risk, if you want to be in high-yielding assets such as junk bonds. I think somebody mentioned you have to take risk. I agree with that. That takes capital. Most of you have a peer group of competitors you've identified who are critical to your own internal evaluation of your success. You can't deviate too far from the capital levels of those peer companies.

I know Dan's going to talk more about U.S. mutual company issues, so I won't get into this now, except to say that there's this terrible dilemma in a mutual company, and I don't know how to resolve it. I'll leave it to you. The dilemma relates to what has happened in demutualizations in the U.S. I think every demutualization has caused the surplus to be distributed to the existing group of par policyholders. Now we're a functioning mutual company that's not demutualized, and if our next-door neighbor has the same capital level and the same dividends as we do, our par policyholders have the same dividend expectations. Say our neighbor demutualizes. Suddenly their par policyholders not only have the same dividend expectations, but they have a whole lot of money in hand, at least in the form of common stock. Now how do I, sitting across the street from them, run this mutual company with a surplus sitting there that is not distributed to them? I don't have an answer to that, and I think it's a real dilemma, one I hope somebody can answer for me. The only obvious answer, if you follow what I said through to its obvious conclusion, is there will be no mutual companies left. They have to demutualize.

In terms of us, what do we come up with? We have not dealt with the issue of demutualization, but we've set our capital strategy. It's important for us to be strong and to be seen as being strong. Given the various markets we're in, and the type of

products we sell, it's not good enough to be strong, we have to be seen to be strong. Despite Dick's statement that companies are financially stronger than they were five years ago, I don't agree with that. I don't think they are. I don't think it's because companies haven't managed themselves well. They have for the most part. It's because assets aren't worth as much as they used to be. Our capital ratios have been declining, as have our Canadian peers. The Canadian group of companies are generally quite strong, however. We've decided that it's not good enough to let capital ratios decline any more. In order to operate where we are, in the markets we are in, and to have the financial strength that we want to have, we've decided that we have to maintain our capital ratios. Remember, we have two of them, and we have set as our internal target to maintain these two capital ratios at our current levels. We've given ourselves some leeway, in that to the extent that we say we have to maintain them, it is not year by year, but over a short-term period. For the moment, we're defining short term as three years, but that could get a little longer. The second measure, the MCCSR measure, is very, very volatile. It would be completely impossible to manage it year by year.

The implications of our policy for a mutual company is that if you say you want to maintain your surplus-to-liability ratio, and you don't want to go outside to raise capital, there's an equation that's fairly obvious. Your return on capital, the earnings you make, expressed as a percentage of your capital, has to be greater than your growth rate or your returns will start deteriorating. So we're now in the position that this equation is a key driving force in terms of allocating capital in our company. At a total company level, if we have 15% growth, if we really believe we've got good opportunities, and we do, and we want to diversify, and we do, we're going to have to make a very good return, or else we're going to have to cut our growth rate in areas where we don't want to cut. That's where we are now.

What about capital allocation? We've now defined what we have to do at a total company level. How do we get it down into the business units? First of all, this panel is made up of actuaries, but I think we should have included a CEO or a nonactuarial senior manager, because this is definitely not a financial process. It's critical to have financial people to help set targets, but the process for managing a company's capital is a senior management process. It has to be part of the management culture, or it will fail. We've talked about all the trade-offs, but I'll elaborate more on that later. At this point, it helps to understand our organization, because I'm going to get specific about the next steps Manulife takes. We are organized among business unit lines that are essentially self-contained, geographic units. We have U.S., Canadian, U.K., Pacific Asia, and reinsurance divisions all with their own general managers. Plus, we now have a trust and banking division. They're all self-contained, with one important exception. The investment operation is an independent division, and that in itself creates complexity from a capital allocation point of view.

The process that we're now undertaking is setting capital targets by division. We're like neophytes. Each business unit receives capital equal to the MCCSR. (In the U.S., this would be the NAIC risk-based capital.) Our business units run autonomously but have no free surplus in them. I'll define free surplus as the difference between a total company surplus and the minimum capital required under the MCCSR formula. The free surplus is maintained and actually has a segmented asset fund managed by corporate management. We set long-term return on capital targets for

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each of our operating divisions. Each one of our product lines has a new business pricing measure attached to it. One of the measures is a premium margin. If we assume the margin is 2% of premium, assume all pricing assumptions were met, assume all in-force assumptions were met, and assume there is no surplus strain, we multiply the premium by 2%, divide that by the capital, and get a return on capital. The numbers are quite large, so either our new business requirements are too high, or divisions can do better than we think they can and better than they've done historically.

Next we bring surplus strain into the equation, because obviously no strain is not an appropriate assumption. We brought that in by saying we want certain divisions to grow faster than others, and we want certain divisions to grow slower than others. That debate is still ongoing and is one filled with angst, there's no question, but at least tentatively we've come to conclusions on that score.

Then we had to consider the competitive realities. Certain marketplaces we operate in, Canada for example, do not offer opportunities for high returns on capital. Other markets, such as Indonesia, offer opportunities for very high returns on capital. We have also not only set return-on-capital targets by major division, we've set it by lines of business within each division, but only at very, very broad product-line levels. It's up to the business units to manage their own operations.

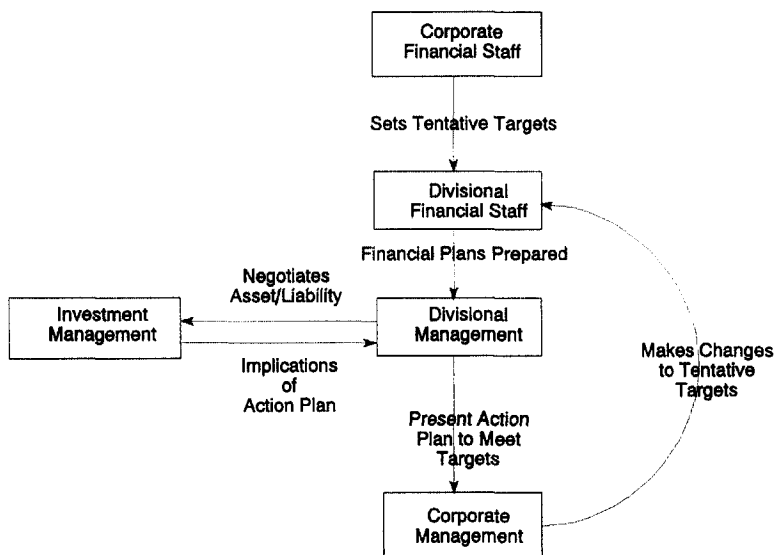
Now that we have these targets, it's up to our operating divisions to produce five-year business plans. At that time, they're going to bring to corporate management plans on how to meet the targets, to the extent they have not met them today. If they're at one point and their target is at another point, what are they going to do to close the gap? Dick talked about some of the things they can do. Some of them are fairly obvious, some of them aren't so obvious. If action plans are unacceptable to the business unit, they will make a plea to corporate. Then we will see if we should renegotiate the targets. I expect to see target-setting as a dynamic process, not one carved in granite.

As I said, financial forecasts and the ability to forecast beyond one year are critical to the process. We have set long-term targets, but we have not set interim targets. For example, if 15% is a long-term target and somebody's earning 10%, we have not yet set targets for next year and the year after. We will do that at the end of the summer. We also haven't had a lot of success at the moment setting a target for the free surplus. It's a tricky issue, depending on the assets in free surplus and how you allocate income tax.

Schematically, Chart 1 is the process and how it works at Manulife. You can see how it involves financial people, nonfinancial people, and investment people. All areas of senior management, financial, and investment operations are involved. My staff and I set the tentative target in consultation with the divisional financial staff. The divisional financial staff then prepares financial projections, indicating what we expect to earn on a return-on-capital basis under our best estimate. The divisional management discusses it with their financial people, identifies the shortfalls, then works with the senior divisional level to determine how to close the gaps. One of the keys in closing that gap is negotiation with the investment operation, because asset liability issues, asset quality issues, and asset mix issues are critical to managing a return on

capital. Divisional management then presents the action plan to the corporate management. Then we'll negotiate with them whether targets should be reset and whether or not their action plans make sense. If we have to reset the targets, we will have to go back to that point in the process and repeat the steps. It looks good schematically, but it's not quite as smooth as it looks on paper.

CHART 1
Capital Allocation Process at Manulife



What are some of the issues we've come up against? We have decided that business units at Manulife should not retain earnings, and I realize there are two sides to this. In other words, if an operation is exceeding its capital targets, it can't use the funds to grow. It has to give them back to corporate. Management of the free surplus is a corporate responsibility. That may give some disincentive not to overearn. Remember, we're a mutual company and there could be some question as to whether overearning makes sense anyway.

Income tax allocation is also an issue. To the extent you want to allocate tax to free surplus, it kills the earnings on free surplus, because free surplus has no way to bring in income, other than investment income. If you do charge your free surplus with income tax, you have to raise the capital requirements of the other operating divisions.

We talked briefly about the level of the organization where the target should be established. We basically do it at a fairly high business-unit level and don't go down to detail product-line levels. We give a lot of autonomy to our business unit heads to manage their operations.

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If you have a separate investment operation, an interesting question might be whether or not the business units should be protected from investment performance. In other words, should there be a transfer price negotiated so that the investment operation becomes a profit center? Our answer is no. You have to have a transfer price for performance measurement purposes, but for return on capital, we are trying very hard to get much closer links between our investment operation and our insurance operation. We want the kind of constructive pressure going from one to the other that these kinds of conversations force. We are saying to the business units that even though they don't directly control the investment earnings, the earnings are a part of their return, and they have to find a way to increase their return if we don't get them through the investment operation. I understand that's a controversial issue.

We've talked quite a lot about what required surplus formula to use. We're using the government-regulated one, or what we think will be the government-regulated one.

Another interesting question is whether a line of business should get credit if it can raise capital and believes it can raise it cheaply. In fact, we have done that. Our trust operation can do that. That may be unique to us, so our answer to that is going to be yes.

In terms of managing return on capital, there are two things to manage – the numerator and the denominator. The numerator is earnings, and I think we all know by now how to manage earnings. At least we know the elements of managing earnings. The denominator is the risk-based capital component. It's fairly complicated and will introduce new elements for us to manage. Dick alluded to asset mix and quality. The real issue of the day is that you can increase your return on capital in the short term by getting out of junk bonds and common stock; however, is that the right long-term decision? Be careful not to make what looked like very prudent decisions in the short term that are going to kill you in the longer term. There's an interesting paper by Salomon's that gets into this in mathematical terms. I think it's well worth reading.

A more matched position helps a little. The risk-based formula is formula driven, and isn't a function of your matching. Liability mix – the types of liabilities and the guarantees they offer – are very important in terms of risk-based capital. In Canada, realizing unrealized gains can be a very important technique, and I do agree with Dick that it perhaps falls in the mickey mouse category. Capitalization of subsidiaries is important, depending on how subsidiaries are treated for the risk-based capital formula. I'm not sure the U.S. has completely come to grips with how to treat all subsidiaries. To the extent that capital is eliminated in the subsidiaries, you wouldn't want to overcapitalize a subsidiary.

Then there is the issue of raising capital. Just raising external capital can be done by raising preferreds and subordinated debt. There are big issues as to whether that's pragmatic or even possible. The market for insurance companies raising capital, at least in Canada, isn't very good. We are an unknown beast, a complicated beast. Rating agencies don't understand it; the public understands it less. There has not been a good market established by the Canadian companies in raising capital, and it's probably true in the states as well; raising external capital may be more theory than reality. We're going to test it out, but we'll see.

Finally, you have to have good information systems to manage all this. This is probably the most underestimated piece of the puzzle in terms of managing the financial strength of a company, not just capital, but earnings. I've put a few musts on the list from our management information systems (MIS) point of view and these aren't related strictly to capital. You absolutely have to measure every one of your assumptions against what really happens. You won't be able to manage your company if you can't do that. You must be able to explain whatever capital measure source you're using, and you have to be able to explain those earnings by source of earnings. You have to be able to produce them quarterly. You have to take into account the specific nature of the company's risk. Perhaps this is unique to Canada. In the Canadian formula, it's incumbent on the appointed actuary to add any elements to the formula-driven risk-based capital to ensure this. So you have to always be vigilant as to what risks your company is taking, and you obviously have to have good asset-performance-tracking mechanisms.

MR. DANIEL J. MCCARTHY: In listening to Rob, I concluded, as I think Dick did, that there was very little that was uniquely Canadian in his presentation, other than the particular risk-based capital elements that Canada has elected to use. But I think much of what he had to say about capital allocation, issues, and approaches would apply in the management of United States' companies as well.

I thought it would be worth beginning with a bit of history about why this topic is so significant now, when not all that many years ago it would not have been. I can't tell you for sure that 15 years ago there wasn't a topic like this on a Society of Actuaries meeting agenda, but I suspect that if there was, it was given a lot less prominence and there were a lot less attendants. Rob pointed out -- and I think we've come to accept as axiomatic, something that I'll return to in a little more detail -- the notion that in the long run, the rate of return on your capital sets a ceiling on the ability that you have to grow an insurance company. Almost without regard to how you measure that growth -- assets, insurance, whatever -- you're going to have that limit. From that point of view, it's instructive to look at a little bit of history. My numbers are U.S. numbers, but I think they'll serve to make the picture.

In the 1960s, the average annual general account liability growth of insurance companies in the United States was 5.5%. In the first half of the 1970s, it was a little over 7.5%. In the second half of the 1970s, it was about 10.5%. In the two halves of the 1980s, it was respectively 11% and 12%.

Now that's a measure just of liabilities. To be sure, there are other things. Just as there are other things that go into a risk-based capital formula, there are other things that would go into general measures of growth. But the results that you would get from them would not be all that different. If you look at individual life insurance, for example, growth rates by face amount were 8% in the 1960s, 9% in the 1970s, and 12% in the 1980s. There is a slight downward pattern in the growth for group life insurance and for health insurance, but if you put everything together and weight them, without regard to asset quality, and just try to get an aggregate growth measure that takes account of liability growth and risk growth as measured by face amount or premium (depending on which line of business you're measuring), you'll get numbers that for the 1960s are slightly under 7%, are about 8% for the first half of the 1970s, and have been double digit ever since. Have we been increasing return

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on capital in those same proportions from the 1960s until now? Anyone who says yes, please put up your hand. I see no hands.

The second thing that has happened in history, which I think is equally relevant, is the shift in the liability mix of life insurance companies over the same period of time. In 1960, 73% of the general account liabilities of life insurance companies in the United States related to life insurance. For the next decade, that ratio stayed pretty steady; by 1970, it was still 70%. In the decade from 1970-80, the ratio fell from 70% to 53%, and in the decade from 1980-90, it fell from 53% to 31%. Life insurance was largely replaced by group pension obligations, which not only grew far out of scale in size, but which also shifted from the traditional pension products of the early 1970s and prior, which put most of the risk on the customer, to guaranteed products, which put most of the risk on the insurer. Liabilities also shifted into individual annuity products. While repriceable in the sense that an interest rate can be reset, they turned out to give customers considerably more incentive to leave the company than the liabilities that were typically underlying a life insurance policy, and a lot less incentive to stay with the company. So not only have we had growth rates that have raced in the last decade and a half without a corresponding rate of increase in return on capital, we've also had a significant shift in the liability mix, which has caused the rate of increase in required capital for life insurance companies to outstrip even the rate of aggregate/ liability growth, because of the change in the mix that has occurred in that period of time.

We heard this before: If your actual capital is at your required capital level, the long-term rate of return on capital will set the limit on the long-term aggregate growth. As Rob pointed out, that's an axiomatic definition that poses some questions. What is the long-term rate of return on capital? Indeed, what is capital? These are questions he raised that we should return to. And what is the long-term aggregate growth rate? I stress the word *aggregate* because, as Rob pointed out, companies do in fact have many options as they consider how to balance growth against availability of capital.

A company can use a mix of very different growth rates among different lines of business. What do you do if the growth rate is too high – if capital cannot sustain the growth rate? We've seen several things that companies could do. One option is to sell noncore businesses as Rob mentioned. Look at the true costs of maintaining those businesses in a before and after sense. Expense allocation can be tricky here. If you're going to sell a noncore business, either because it is not producing an appropriate return or just because you need a one-time fix to lower your capital requirements, you had better look rather clearly at what the company will look like before and after that transaction, because a lot of what you may think of as expenses associated with that noncore business don't necessarily go away.

Second, consider the needs of your sales force. Sometimes a noncore business may in fact be a product that's important to your core sales force. For example, a number of companies lately have been getting out of the individual disability income business. Those companies have sought quickly to arrange another facility so that their sales force has a product that they can sell under the auspices of the same company, although it's typically underwritten by somebody else and may, in fact, carry somebody else's name.

Finally, consider who the ideal buyer is. I suggest that not only from the point of view of what price you can get for the business you're selling, but also particularly if the outlet for your sales force for that business is going to be the buyer of the block of business, you'll want to think about competitive issues very clearly. Is this sort of thing in fact a one-time fix or a permanent solution? I suggest that it could be either. If the business that you are disposing of was part of what was creating the drag on your return on capital, then it may be part of a permanent solution. If that business was holding its own in terms of return on capital, and you are simply disposing of it to free up the required capital, about all you're going to get is breathing room. Now breathing room isn't bad when you need to breathe, but you do need to understand the differences between temporary and permanent solutions.

Businesses can be sold in many ways. Sometimes it's possible to take the noncore business public or look for a partner for it. Many companies in the United States, mutuals in particular, have talked about the possibility of getting noncore businesses into subsidiaries, which can then be taken public, or they can get some other venture investor as a partner in the subsidiary. Many people talk about that, but it doesn't actually seem to happen very much. Companies in the U.S. have had the same problem here that, according to Rob, some companies in Canada might have had approaching the capital markets there. That is to say, it may be lack of understanding, it may be a difficult story to tell, and in point of fact, if the business that you have put in the subsidiary isn't really a separate business at all, but just kind of an allocation of something that you're doing generally, I think that investors may be very skeptical as to what's in it for them in that kind of an operation. In any event, it doesn't happen very often. In fact, property/casualty mutuals in the United States have been more successful than life companies in getting unrelated business into subsidiaries and in getting public money into them.

Another possibility is to refocus your products for lower capital requirements. For example, I talked before about the growth rate of insurance company general account liabilities in the 1980s. In point of fact, life insurance company separate account liabilities in contrast grew at a rate of over 20% in the 1970s and over 15% in the 1980s as companies were successful in diverting some pension money, and to a lesser extent some life insurance money, into products that didn't create the same capital requirements. It will be interesting to see exactly how much of that continues to happen.

I would suggest for your reading in the life insurance area, if you're interested in this subject, a report that was just issued by the Securities and Exchange Commission (SEC). It's a 50-year analysis of the regulatory results of the Investment Company Act of 1940. There is a discussion of variable life insurance which, while naive in certain respects, contains some key recognitions that may result in changed legislation. The SEC concluded that the analogy into which variable life had been forced, that of a contractual plan mutual fund, was a poor analogy. The capital requirements were different, and companies that wanted to get into variable life had been saddled with requirements that were just inappropriate in relation to the product. Now having said all that, I'm not sure I agree as much with the solutions they outline as with the problem they identified. But since problem identification has to precede a solution, at least it was helpful to read that in an area that holds real promise for life insurance companies, there is some possibility of regulatory relief.

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Another example is what's happened in the group insurance business. Fortunately here, there was another driver as well – premium taxes. The result was that lots of business which, in fact, was not really very much insurance-related at all, has now been turned into a noninsurance product – administrative-services-only contracts, or their equivalent. In fact, for life insurance companies in the U.S., although the rate of group business they operate, measured by claims processed, grew very dramatically in the 1980s, the rate of growth in group health insurance premium was single digit in the 1980s. That's primarily because of the shift of a lot of business into a noninsurance product that had lower capital requirements.

Strategic partnerships again are more talked about than are actually happening, but there are some instances of insurance companies entering into partnerships with major sellers of their products, typically institutional sellers. There are some instances of companies entering into partnerships with managers of complementary products as a group insurer, an HMO or hospital company, and potentially, there are possibilities for partnership between insurers and suppliers of capital that have an interest in the particular product or enterprise that's going to be sponsored. Again, it can happen. It amounts to looking for capital somewhere else, in a way other than getting equity in the sense that Rob defined it.

Finally, you can vary the growth rate by business unit. Certainly in the 1980s, companies have had to really think about what their core businesses were. As one example of that, we maintain an ongoing comparison of the top 40 companies that meet certain criteria in the group insurance business. From 1985 to the present, there obviously have been companies that have moved into the top 40 and companies that have moved out of the top 40. Almost without exception, the companies that have moved out are companies for which group insurance was not a core business. In some cases, companies have exited entirely during that period of time. Again almost without exception, they have been replaced by companies for which group insurance was a core of business. These companies perhaps either shrank something else or found some more capital. At any rate, varying the growth rate by business unit is certainly something that happens.

I suggest to you that in thinking about that, even within a core of business, I believe you can distinguish core needs of a core business from noncore needs of a core business. For example, if your core of business has individual life insurance and you have a career sales force, there are some things you will need to do to sustain the growth of that sales force and keep it healthy. On the other hand, there are some things that you can do or not do. An example would be acquiring other distribution units and merging them into that sales force. If you have excess capital, you may want to do it, but it isn't as essential to the maintenance of that business or the maintenance of that sales force as the basic requirements of funding the ongoing operations of the sales force. So even within a core of business, I believe you can distinguish core needs from other needs.

The last thing you can do is mortgage the future. You can do that, but that requires an additional strategy as well, because inevitably the future does come and if it's been mortgaged once, it can't be mortgaged again. Mortgaging the future notwithstanding, that isn't always bad. Dick spoke glowingly of reinsurance, an excellent way of mortgaging the future and sometimes a very worthwhile thing to do. If in fact, a

company has a particular opportunity that presents growth opportunities to it that are beyond its capital, and believes in the long run that it is going to catch up, reinsurance is not an unreasonable way to do it. As was pointed out for a mutual company, leverage of that type, or of other types, typically has to hit the insurance company itself. You can't upstream leverage and then pass the capital down. So mortgaging the future may be worthwhile, but you've always got to know what happens when the future comes.

Think about the effects of inflation on this. First of all, and this was certainly a factor of the 1980s, you've got to have higher nominal growth to achieve the same real growth. Second, I suggest that the rates of return for many insurance products are not positively correlated with inflation. There are some that are kind of negatively correlated with inflation, and the fact that assets tend to lengthen and liabilities tend to shorten in those environments contribute to the lack of correlation. Inflation aggravates all of these problems. We saw that in the first half of the 1980s. Clearly we are not seeing it today.

Rob posed a question comparing two identical mutual companies, one of which demutualizes and one does not, and he said that the policyholders of one get what they had and something else too. The policyholders of the other get only what they had. How can that be? I suggest to you that the reason that can be is that those policyholders never had a fair expectation of the bonanza that a demutualization may provide to them. If that happens, it's nice, but it's not part of the deal. I believe that thinking about demutualization, which is a possible key capital raiser for companies, should be thought of just that way. Certainly policyholder interests are important, and if you go ahead and do it, you can't ignore them. But having a well-run company that provides their benefits over the long term is far more important. I think that if a mutual company applies its surplus well and gives those people fair return, it's doing the deal that those people signed on for.

But let's think a little bit about issues in relation to demutualization. It's kind of topical nowadays. First of all, when you demutualize, you're selling the company, and you can only do it once, which means that you need to think about whether you want to do it, or when you want to do it. That sounds so trite, but it's important, because it's a source of capital that you get to go to only one time.

Second, unless there's a reason to do it, most managements will prefer not to demutualize. I'm not sure that's bad. I'm not making a case here for or against demutualization, but I don't think that there should be an expectation that a mutual life insurance company is in business to demutualize, and the thinking of most managements seems to go that way. On the other hand, a time of specific need is probably the worst time to do it. You're under the gun, the markets may not be as available, your situation may not look as good, and you simply may not get as good a deal for the company as an ongoing entity or for the policyholders as if it had been done without being under that pressure of something to think about. The one case that goes the other direction on that is that a time of specific need is probably the best time from the point of view of dealing with the regulatory environment, because the regulator will understand the need, and if it's a problem that the regulator wants to see solved as well, that can be helpful. If the regulator doesn't perceive a problem and isn't interested in a solution, you've got an uphill walk.

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What the policyholders get in a demutualization, and the methods for determining that, and my focus now is entirely U.S., are still extremely inexact. I would recommend to you as very worthwhile reading, if you are interested in the subject, the Society of Actuaries "Report on the Task Force on Mutual Life Insurance Company Conversions" that appears in the 1987 Volume XXXIX of the *Transactions*, pages 295-391. The mathematics is all there in terms of what the policyholders get, how much capital can be raised, and all that kind of thing. It's very well done. But nonetheless, the process for determining one of those is that you have to fix something before you can talk about anything else. You have to fix policyholder return, or how much capital is to be raised, or how much of the distribution goes in cash. Many things move, and you have to start fixing them before you can solve it. It's a very inexact science.

Essentially in the United States, the state laws that govern that are of four types. The first is what I'll call the smell test, or the "you'll know it when you see it law." Laws like this exist in several states. They say that the plan must be fair and equitable. It must be found by the supervisory authority to be fair and equitable, and they give you no more guidance than that. At least one demutualization, Maccabees, in Michigan, took place under a law that didn't say much more than that.

Second, many states have a variant of what is sometimes referred to as the Williams Act. I say *variant* because I've never seen two versions of it that are exactly the same. The Williams Act was an attempt at a model law almost 40 years ago, and a number of states enacted it. Those of us who had read it used to think that it told you how much value had to go to the policyholders. We found when Union Mutual demutualized that it didn't tell you that at all. At least it was so interpreted there. It contained a prescription for how to allocate those proceeds, but gave no specific clue, as it was interpreted, as to the amount.

The third type, and this is found in a couple of states in the Midwest, are laws that I think if anybody ever tried to do anything on the basis of them would cause great mischief, because they are written from the point of view of sort of a local cooperative that's winding up its affairs. It attempts to apply those kinds of theories to the operations of mutual life insurance companies. I don't think it can be done. Those laws contain some other peculiarities as well, apart from the distribution. In at least one state, there is a prescription, which probably grew out of local cooperative theory, that requires that 3/4 of the policyholders must vote. You must then achieve a 2/3 majority of that vote. I think that all companies that have demutualized have, I think, made a very good faith effort to get out the vote. Nobody has even approached 3/4, and I think it would be virtually impossible to do that, quite apart from issues of what the policyholders should get.

An illustration of the fourth type of law is the New York law. In some cases, the New York law does, in fact, prescribe exactly how to calculate what the policyholders get in the aggregate. Those cases are not the cases under which, for example, Equitable is demutualizing. I think it unlikely that the specific or prescriptive cases in the New York law will ever be used. So that law, which is copied in at least Pennsylvania and in a prior form in Iowa, contains much more detail, but it doesn't necessarily get you to the key question either. When you have a situation in which the methods for determining what the policyholder will get are very inexact, you have

a great deal of uncertainty over one of the key elements of a demutualization, which is how much capital you can raise.

Let's talk about a couple of major aspects of this form of capital raising. I think this is the most important question of all. I think before a company can demutualize, you have to have a real good picture of what it's going to look like the day after you have done all this and gone through all this. What capital does it have? Who owns it? How is it going to operate? And what will its culture be? The last of those is the least quantifiable, but in many respects the most important, because there is a distinct gap between the way the company will operate before and the way the company will operate after it goes through this change. It is a form of capital raising unlike many other forms that do not introduce that kind of cultural change. All of these are questions that need to be understood in advance. Inevitably, they aren't understood fully in advance, but an attempt needs to be made to understand them to determine whether a company is willing to face this particular aspect of capital raising.

Another thing to think about is that it's capital raising with a long lead time. There are lead-time issues. Where's the capital going to come from, and from whom? One of the relevant aspects is the company's history. Because, among other things, promises made to policyholders in the past, and the company's earnings history in the past on policyholders of the present, will have much to do with the form of the distribution and the protections that need to be put in place to the policyholders.

This leads me to the third item. What will be done to protect their future rights? A very complicated question, done slightly differently in each of the demutualizations that had been done, but it must be faced. Those policyholders have a contractual right. It has been found in every case, and I think it is now accepted that they have a contractual right, not only to their guaranteed benefit, but to "participation," whatever that means. And whatever it means, it's got to be preserved in some fashion, because that is not what you are paying them for when you make a distribution to them. Last then, is the amount and form of the aggregate payment for those policyholders, and that's got to tie in with elements of fairness and capital raising.

Speaking of capital raising and form, it's worth looking at a few cases. I've tried to answer two questions. When was equity capital raised, and what was the form of the policyholder payment? At UNUM, that capital was raised in a public offering at the time of demutualization. The policyholders got proceeds or a distribution that about 1/4 cash and 3/4 stock. In that case, and in the others, other than Maccabees, policyholders who were getting a distribution below a certain amount had the option to take cash or stock. You will not be surprised to learn that the percentage that take cash is something more than 90% in all of those cases.

At Maccabees, as the capital was raised before demutualization -- its form was not equity capital then, but it was convertible into it -- it was paid into the company. This is, as you may know, a demutualization that was at the same time an acquisition of Maccabees by Royal. Policyholders here were paid in cash, not in stock. It's possible to do other things with benefit guarantees and so forth, but in this case, they were paid in cash.

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Northwestern National was a somewhat peculiarly structured company before the transaction in that it was a public company, but it had a stock branch as well as a mutual branch. Equity capital in the insurance company was not raised directly. I should say equity capital in the entity was not raised at all. To cover the cash portion of the distribution, it had a debt offering. Its holding company contributed that to the insurance company and used that to pay out the cash. It worked out to be about half cash and half stock. That was a key balancing issue that every company has to look at in terms of these proceeds.

Equitable got an infusion of capital before demutualization, which will convert on the day of demutualization (it will raise more at demutualization). It hasn't happened yet. In fact, the demutualization is contingent on the successful public offering. The cash-stock ratio has not yet been determined, but the concept that's been enunciated, and pretty well publicly discussed, has been the same. Below some threshold, policyholders, except those who want stock, will get cash. The cost of maintaining shareholder records is substantial. The consequences (2.2 million shareholders, which would break some kind of record) would be sort of awesome. So the focus is on getting that number down, except for the rather small number of people with small shares, who for whatever reason, would like to be a shareholder.

Let's think about categories of companies and what their options are by raising capital through demutualization. Type 1 is a medium-sized company outgrowing its capital. That company can raise outside capital and remain independent. In fact, in a sense, UNUM was in that situation. It was not on the doorstep of outgrowing its capital, but it had a very dramatic growth rate and it might well have confronted that. It did, in fact, raise outside capital and remain independent. It helps to have a good earnings record when you do that.

Type 2 is a small company outgrowing its capital. Small public life insurance companies are a breed in the United States of late that have been disappearing, not being created. It seems far less likely that a small company, which is outgrowing its capital, could do the same thing as a larger one. Demutualization via takeover, the Maccabees as an example, is perhaps a more reasonable thing to expect. Possibly you could imagine a background investor of some sort who would take a major piece and not actually take the company over. There are many possibilities, but it seems less likely, below some size threshold, that public money in the usual sense of a broadly sold initial public offering (IPO) could be used as the basis for raising capital in a demutualization.

Type 3 is a large company with low return on capital. Well, what's possible there, raise outside capital and remain independent? Revitalize that company. Rob talked about access to the markets. The markets want to see something in order to provide money. This suggests that a number of companies that might well think about demutualization have other issues they have to face first to approach this method of raising capital.

Type 4 is a medium-sized or small company with low return on capital. How can you say forget it? Companies of that sort are probably more likely a candidate for a merger. Maybe, if they're lucky, they can effect some strategic partnership with a

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nonlife insurance entity. In any event, they will very likely see a merger, rather than a demutualization, that involves really going out and raising capital.

As I've said, this form of raising capital is a major cultural change in a company. But it is a method of raising capital that has cultural and operational, as well as money-raising aspects to it, all of which need to be considered before a company approaches it. As I said at the outset, you can only do it once. If you do it once, and do it wrong, perhaps the policyholders will benefit in the short run, but I'm not sure that is a fair trade-off to the amount of mischief that can be created. So in terms of raising capital by this means, it is not surprising to me that a number of mutuals have looked at some of the other capital management techniques that we've discussed. They have looked at issues of noncore businesses, looked at what growth they absolutely had to have versus what they might like to have, and looked at repositioning businesses, rather than having gone to the well for the type of capital raising you can only do once.

MR. ROBERT OZENBAUGH: Dick Robertson mentioned that his company was attempting to make its required capital formula at least be consistent in the ways it could with the NAIC formula. For my company, the NAIC formula is substantially less than Moody's, Best's, Lincoln National's, or our own formula, but ratings are very important to us. So I find myself managing to the most stringent of those formulas, not to the weakest. My question is, do you really see the rating agencies, that really love to compare companies, moving toward the NAIC, which is a solvency measure? Or do you see the NAIC being more of a nuisance calculation for many companies, that in reality will probably not come into play in the management of the firm?

MR. ROBERTSON: I may have misstated if I implied that we were going to try to conform our formula to the NAIC formula. What I meant to say is that, to the extent we can eliminate differences in categorization of businesses that don't serve any worthwhile purpose, we might do that just to simplify things. But as a matter of practice, I would expect that our target formula will produce a level of surplus that is substantially larger than the NAIC formula and will be a much more complicated formula that will take into consideration a number of factors that are peculiar to our own operations. In particular, our C-3 component currently results, in part, from internal cash-flow testing of how our asset and liability mix performs under a variety of economic conditions. You can't do that with a public formula. Now the question you asked was the more specific one. To what extent will companies calculate and use the NAIC formula for management purposes? I think I tend to agree with what you implied, that unless the company is in a position where it is going to be constrained by the NAIC formula (below or near the NAIC level), I would not expect that it would be a major factor governing its operations. You asked about what the rating agencies are likely to do. I'm a bit cynical here. The formulas that most have been using, in particular Best and S&P, have been pretty poor. If they used the NAIC formula, that would be a major improvement. I expect they probably will use it as one factor in their overall evaluation process, and I hope they don't overuse it.

MR. MCCARTHY: I think it's important to distinguish the shape of the NAIC formula from the level. I'm aware of several companies that have had their own internal formulas and have decided to go to the NAIC formula, but not at 100%, and simply set the bar considerably higher for reasons you suggest. They concluded there

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wasn't enough difference between their formula and the NAIC to justify keeping both. They could just figure out the right level of the bar and go from there. I think *shape and level should be distinguished in these conversations.*

MR. R. STEPHEN RADCLIFFE: Does the issue of the fairness, of what you described as bonanza distribution to policyholders, come up? It's really a tontine distribution of profits that have accumulated, maybe over a century, to policyholders of current record. Does that issue come up when you're working on demutualizations?

MR. MCCARTHY: It has come up. It came up in fact in the SOA task force discussions during which time Harry Garber, who is the chair of that task force and was fond of quoting Woody Allen, said something to the effect that 80% of life is just showing up. It is peculiar. One of the difficulties, Steve, with alternative kinds of thinking to those you suggest, and was hinted at in Minnesota in the course of Northwestern National, was that if you say that whatever is a fair distribution shouldn't go to the current policyholders, then the beneficiaries of the escheat laws (the various states), get thinking about who else it might go to. That's a solution that nobody's had any stomach for. So I think, by and large, the feeling has been that once you have figured out what is fair in the aggregate, in relation to these people who are the best proxy we have for formal ownership to a company, is going to go to them, because there isn't anybody else, and they're the ones who happen to be there. Nobody's figured out a way to give it to management.

MR. ROBERTSON: Well, actually that's not true.

MR. MCCARTHY: Nobody's figured out a way to formally give it to management.

MR. RICHARD JUNKER: I've looked a little bit at these formulas, the C-1, C-2, C-3, C-4 components. The NAIC risk-based capital formula is a minimum, and it's a couple of percentages of premium, and it's a half percent of health premium. They are *pretty small numbers relative to most company's surplus, it seems.* I'd like to address this to Dick. In the *Reinsurance Reporter*, there was a reprint about how the Lincoln goes about it, and the C-4 component, if I recall correctly, was about 10% of all the other risks. There was some mention that one of the factors in setting that percentage was a level of sophistication and effort that the company makes in setting its various components of risk. We see the companies that have gone broke. It has been to some extent C-1, but much of it has been just management. Yet both of these formulas seem to contribute a very small share from the C-4 component. That strikes me as a little bit risky.

MR. ROBERTSON: That's probably a fair assessment. The problem with a significant part of the formula specifically allocated to the C-4 risk is that you then have the question of how to measure it. Do you measure it in accordance with premium? Do you measure it in accordance with assets? Once you go down that track, it becomes just as convenient to combine it with one of the other risks and allocate it in that way and define it in that way. I think you could come to the same result by cutting the other factors by some percentage and increasing the part that's called C-4. I'm not sure what will be accomplished. From the point of view of a regulatory perspective, I think I very much agree that most failures result from things that haven't been anticipated. In fact, that's almost axiomatic. From the point of view of managing our

company though, we have to at least maintain the pretense that we've anticipated most of the things that can go wrong, and we're good enough that we will avoid the unexpected. It's a bit of psychological games being played here clearly, but it's an effective way of doing it. It probably does more good than harm.

MR. JOHN W. H. TAYLOR: In Lincoln's formula, there's a lot more emphasis placed on the C-3 risk and it's a larger number than what the risk-based capital (RBC) is showing. Is there some issue there that may come close to covering 100% of the scenarios? Do you see some issue where we may be somewhat redundant, in say a Lincoln National C-3 risk approach, in light of the new reserve requirements?

MR. ROBERTSON: I hope our C-3 provision in our risk capital formula is redundant. It's designed to be. I do believe that the risk that most life insurance companies are most exposed to the C-3 risk. In fact, I think that there is a serious danger today, that because of recent history, far too many people, far too many companies, far too many evaluators, whether they are regulators or rating agencies, are focusing on the C-1 risk, which I believe now is reasonably well under control. I think they are following the temptation to fight last year's battle, and are losing sight of what might be the next problem. I also observe in the environment that with interest rates the way they are today, with all the focus on avoiding credit risk, with the shape of the yield curve as steep as it is, there is an extraordinary temptation to lengthen durations of investments. I am worried that companies are yielding to that temptation and are taking more cash-flow risk than they ought to. Now the techniques that are being brought into play -- cash-flow testing, standard valuation law, the requirements that are to be placed on the actuary to form opinions as to the company's financial condition -- are all designed to try to counter that, and they will be helpful. But our models are assumption driven and we cannot anticipate what might happen under these scenarios that we are testing. We can only project, and if we project wrong, it can be very costly. I'm worried about this.

MR. MCCARTHY: I have a question for Dick. You commented before, and Rob took issue with the statement, that the life insurance companies in the aggregate today were more solid than they were four or five years ago. It seemed to me that if I were to reach that conclusion, I would have to say, in effect, all those assets they had four or five years ago weren't any good anyway and now we're just recognizing it. I wanted to know if that's your reason or if you had another theory.

MR. ROBERTSON: Well, that is perhaps part of it; in the sense that a bad mortgage that was made five years ago was just as bad five years ago as it is today, but it's more than that too. Companies have been building surplus over the last few years, and in spite of all the publicity that we have received for all of the problems of our commercial mortgage portfolio, the values in investment portfolios of most companies have gone up, not down, in the last two years. In some cases, they have gone up at a very substantial rate. The investment markets in aggregate have been very good to us, even though the commercial mortgage sector has been horrendous. So I think, even if you sort out this issue you raise as to whether it's just a reevaluation of the problems, the industry is significantly healthier today. Profit margins are better, too, by the way. That's an important factor in evaluating financial strength.

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MR. MICHAEL E. MATEJA: I have about a 20-year perspective at looking at risk, largely from the standpoint of a large stock life insurance company. Over that period of time, I'd say that our efforts were woefully inadequate and that we always missed the mark. Back in 1979-1980, we were fortunate enough to take a large position of advanced commitments in the mortgage loan area. Those were front-end in mismatch risk. Through the 1980s we found ourselves exposed with the commercial mortgages. Here, as we move into the 1990s, the movement in the stock market back in 1987 set twice the standard I guess that it otherwise had. It was about 11% back in the Depression era, and no one would have guessed it would hit 22%. All of those things were just beyond comprehension. The reason I mention it is that the things that have hurt the insurance industry have always been in the area of what I would call catastrophic risk -- things that were sudden, unpredictable, discontinuities, inexperience, and beyond our ability to relate to. As soon as they happen, we kind of catch up to it, and the companies adjust to it. They then will manage their affairs in a way that is responsible, and those risks will then be brought under control, as I think the commercial mortgage loan situation will ultimately be brought under control. I am sure there are things incubating out there today that will be tomorrow's surprises, and the secret is to figure out what they are. Years ago, as chairman of the combination of risk task force, I wrote something to the effect that risk, by its very nature, is very difficult to understand and equally difficult to quantify. I think that's the most profound thing that can be said about the whole subject that's been discussed.

MR. MCCARTHY: Very well said, Mike.

MR. JOHN B. DINIUS: I'd like to ask a question that's further to the comments that Dan McCarthy made and follows up on Steve Radcliffe's question regarding to whom the surplus belongs in a demutualization. A few years ago, a similar discussion of demutualization occurred with the chairman of John Hancock discussing the issue and assuring us that John Hancock had no intention of demutualizing anytime soon. He made the observation that any large mutual company is probably in many lines other than the individual participating lines, and he spoke about the apparent inequity of taking the surplus from all of these lines and returning it to just the individual life policyholders. I wondered whether the answer to that is the same as the answer to Steve's question, or whether this raises a further issue, having the much larger surplus that doesn't even belong to the line of the participating policyholders.

MR. MCCARTHY: I think it's a different question. First, I did not intend to suggest in my answer, and I don't think Steve intended to suggest in his question, that we were talking about a distribution that would go to individual policyholders only. In fact, in every demutualization that has happened, or in the case of the Equitable that is presumably about to happen, that has not been the case. Distribution has been to participating policyholders of all lines, and as it turns out, for mutuals domiciled in New York, of which Equitable is one, until recent years, that meant all policyholders, at least in the parent. Now I'd be willing to argue that nonparticipating policyholders, of whom there are some, don't, in fact, have that interest. It was never part of their deal; their contracts say so. They may have voting rights in some states, by the way, and in those cases they surrender those and need appropriate compensation for them. But I would not suggest that you look only at the history of the individual policyholders and give everything to them.

Now it raises an issue concerning orphan surplus. The easiest thing to do with orphan surplus, in effect, is to distribute the orphan surplus in proportion to the contributed surplus.

At least at Northwestern National, the orphan surplus was tracked by line and was distributed within each line in proportion to the contributed surplus of the current policyholders in that line and that had a difference. We would have gotten a very different answer if it had been done a different way. The last thing I would point out was an interesting aspect in the case of Union Mutual. It had maintained, prior to demutualization, a dividend formula in which it explicitly returned to its individual policyholders not only normal earnings of that line but a piece of the earnings of other lines. This treated the individual life policyholders as having been the investors at the outset, because that was the first line the company had. In effect, with demutualization, in addition to the distribution those policyholders got, they got an expectation that, assuming continuation of experience, that level of dividends, which included that contribution from other lines, would continue. I guess I would summarize, John, by saying that when you look at these, you are struck by the fact that mutual companies are not all alike. In fact, every one is different, and a key in figuring out what is defensible and fair, knowing that fair isn't a unique concept, is getting to understand what the nature of the company is, what its history is, and how that is relevant to a decision as to who most fairly gets what.

MR. SMITHEN: I just have a couple of comments on that. First of all, the issue you raise is a very good one, particularly for the Canadian companies, where far and away the majority of their liabilities are not participating. In fact, there could be the bizarre situation where you stop selling par business completely, which is perfectly legal in Canada, and eventually you don't have any par policies.

MR. MCCARTHY: You're not going to surrender your par policy, is that it?

MR. SMITHEN: I know we're not going to answer this, but I find it extremely troubling. Most of the demutualizations so far, I guess all of them, have come about because of raising capital. But what about the issue of the disgruntled policyholder who sees he can get rich by a demutualization? Is that right? Is it appropriate? I'd suggest not. I have no answer. If the current par generation doesn't own the company, who does? I don't have an answer to that question, but the way the answers come about is not very satisfactory.

MR. JAMES F. REISKYTL: I'm more interested in how to run a mutual company and in your comments about managing capital. The question I ask is really related to what you've just been commenting about. You said earlier you could, perhaps, put capital in Indonesia at 15%, if I remember the number, or something like that. I presume you would only do that if it was to the benefit of your mutual policyowners, and you have an alternative of either investing in Indonesia or investing in General Motors stock or something else. But I think the basic issue is of your par and nonpar line, and who you really are. I think anything you wish to comment on in that direction would be helpful, because you could leave me and the audience with different impressions. I think managing capital is an interesting topic, but the question is managing it for whom. Are you simply a self-filling pot at the end of the rainbow, or do you have an objective?

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MR. SMITHEN: It's a fair question. We decided several years ago to manage our operation effectively like a mutual management holding company with a bunch of stock companies as subsidiaries, because we couldn't figure out any other logical way to manage it, and there was no way to have a thriving dynamic operation, which is important I think. If you manage in a pure mutual concept, which your company might, but very few do, there is the danger of being quite a stagnant operation, which in itself will not be in the best interest of the policyholders, because you won't, perhaps, attract the best type of people, or perhaps you won't be doing creative new things. So we adopted this concept, and it's important to know our history for this too. We used to be a stock company, mutualized, and actually if we demutualized, we might do it twice and be able to break your one-time only. So we decided --

MR. MCCARTHY: No, you'd have to mutualize again.

MR. SMITHEN: Yes, we probably would have to. To get a return on investment, above what we can get outside investing in General Motors stock, your question is in whose interest. If returns are above those needed to manage the company in a way I've anticipated, we pass that back to the par policyholders. We have elements in our dividend scale recognizing the earnings on par business plus a portion, to the extent there are any, of excess earnings on nonpar. The goal is to maximize the return to our par policyholders. Is this the best way to do it? We think it is, but I recognize there are other ways.

MR. MCCARTHY: I think the key in what Rob said is the goal. I think that's consistent with the answer that was suggested in Jim's question. Mutual companies have got to be able to answer that question, and I think the answer is the one that Rob suggested. There are many different ways of getting there, but that's got to be the answer.

