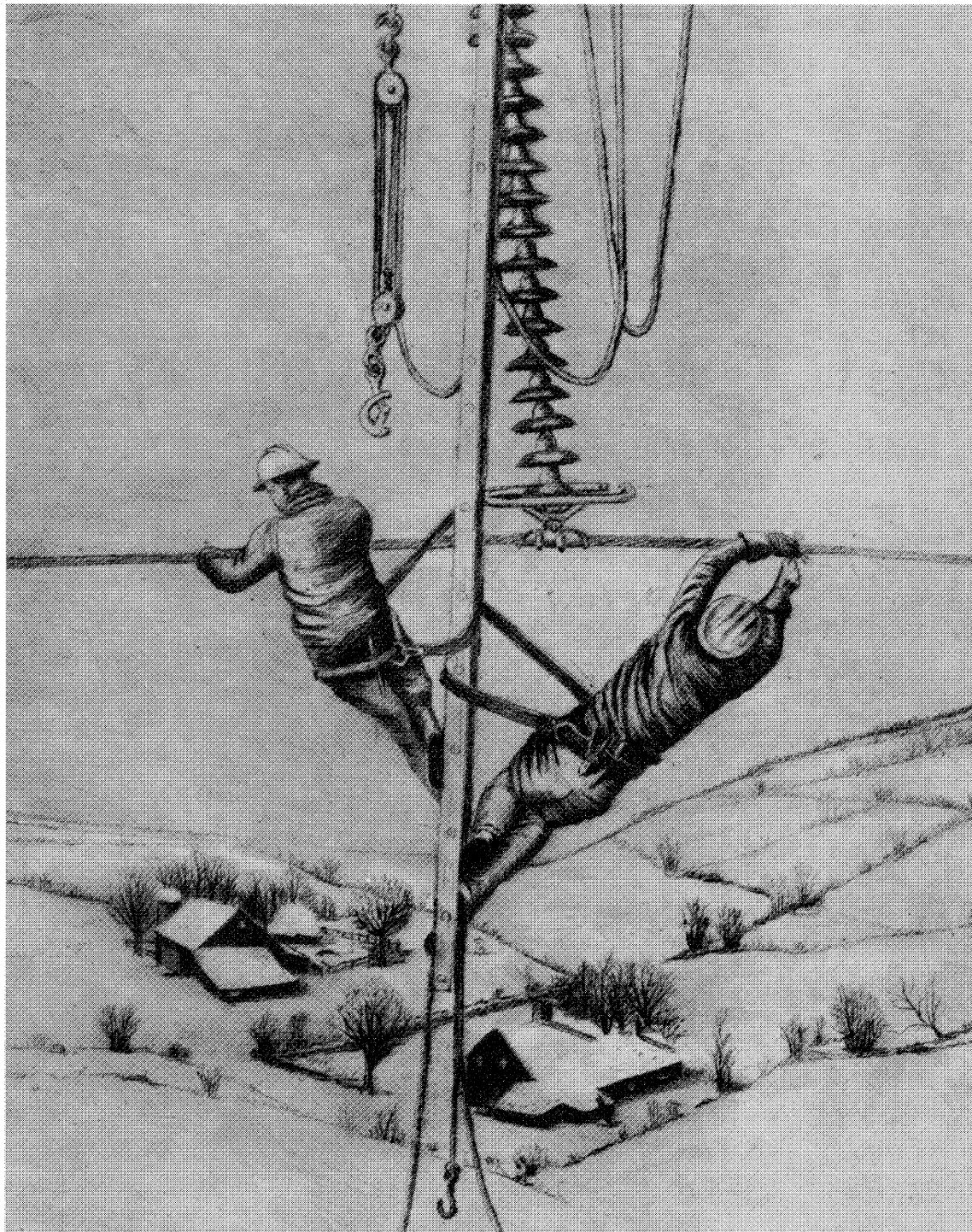


Dividend

The Magazine of the Graduate School of Business Administration • University of Michigan • Fall, 1973



The Role of Energy in the Nation's Economy - Page 4

LETTERS TO THE EDITOR

Editor:

As a former Federal Power Commissioner (who was charged with the responsibility of regulating natural gas at the wellhead) I found Mr. White's article on "Limitations on Rationality" extremely interesting. In particular the necessity for a decision-maker to have proper information on the outcome of the consequences of his decisions, as Mr. White points out, is crucial. The inability of the Commission to know how the industry was responding to the established price proved to be one of the crucial factors in the developing shortage of natural gas.

Charles R. Ross, MBA '48
Hinesburg, Vermont
(Federal Power Commissioner
1961-68)

Editor:

Excellent edition of *Dividend*. Attention to the *small* businessman—entrepreneurship—is most refreshing. Here in the land of massive government doing business with massive industry, one hardly ever even hears the word.

Especially valued "Limitations on Rationality" by B. White. Unfortunately, one sees less than rational decisions taken each day for exactly the reasons he describes so well. Some of us "bureaucrats" are trying to find remedies.

D. Freeman, '52
Washington, DC

Editor:

Enjoyed the Spring 1973 issue. Your *Dividend* must be cash to a lot of people. Thanks for a good job.

Dr. Raymond W. Lansford
University of Missouri
Columbia, MO

Editor:

The unique feature about my current employment is that I have the opportunity to deal directly with key executives from five-man companies to multi-national giants.

One of the characteristics that I have observed as being most important for entrepreneurs or professional managers in a decision-making capacity to have is "tenacity." The decision-maker must not be overwhelmed by either the abundance of or the lack of information. He must have the "tenacity" (or intestinal fortitude) to bear with the situation and reach the optimal conclusion in spite of both internal and external pressures.

Richard A. Saputo, MBA '61
Account Executive
Booz, Allen & Hamilton, Inc.

Editor:

I read with great interest your article on the small business entrepreneur, as I have been in business for myself in the Hospital and Industrial Supply business since 1960.

I have experienced all the problems mentioned and then some. I believe all the problems can be solved if and only if the businessman wants to be in business for himself more than anything else in the world.

If this is the case, then there is no greater career in the world.

I would like to see more articles devoted to the small businessman in the business press.

"Bill" Chapel, BBA '56
Chassell, Michigan

Editor:

Glad to find that "something" is finally being done to help the small businessman. He outranks the big businessmen in numbers but has been almost entirely ignored. For a businessman to obtain directly relevant schooling before venturing into his own business is virtually impossible. (A few poorly done high school night courses occasionally are offered.) I would suggest you study those businesses that *failed* and why. A possible start would be to interview those CPA firms which have experience with the small and newly started businesses. In many cases, the story is tragic . . . bankruptcy, divorce, physical and mental collapse, and death. Sadly enough, in most cases, entirely avoidable. But ignorance of even the most elementary business principles continues to take a terrible toll in effort, savings and suffering. The second area of study which I feel is of great potential is to determine (and get the facts to those businessmen concerned) why small businesses apparently have succeeded over the rough early years only to fail in a very short time once a certain profit level is reached. Third suggestion: information or training in areas that help cause failure such as credit investigation and cost, collecting accounts receivable, suing in small claims court, 100 percent penalty for not paying federal withholding taxes, bankruptcy protection as incorporating, etc.

Wade Montrieff, CPA
Dearborn, MI 48126

Editor:

After reading the current "Dividend" on "How Do You Teach Small Business?" I decided I was born "40 years too soon."

While getting my MBA degree during the depression (MBA 1935), I leased a service station and ran it as the means of support in putting myself "thru the U."

So—"How Do You Teach Small Business?" Have the student operate his own business while getting his MBA degree.

Harold M. Beam
San Clemente, Calif.

Editor:

Please stop sending me your publication called *Dividend*.

If I followed your advice in *Dividend*, I'd be broke instead of a wealthy man.

George E. Bisbee
Jackson, MI

Editor:

Bernard White's analysis of Halberstam's *Best and the Brightest*—is timely, thought-provoking and succinct. All the reasons given for errors in decisions made in running the Viet Nam war, hold true for the lamentable mess currently being exposed by the Watergate hearings. The unquestioning, unswerving, blind loyalty demanded of all staff members by Pres. Nixon, as by his immediate predecessors in the White House, constitute a deadly cancer on the body politic. Similarly, management men in business and industry who will brook no word of disagreement or opposition, pay the long price to inflate their egos. *Dividend* is indeed a dividend. Thanks.

Harris D. McKinney, 23E
Chestertown, MD 21620

Editor:

After reading Spring 1973 *Dividend* I hardly know where to begin because I'm in one of the poorest managed industries in this country, and we do have "limitations on rationality." The managing entrepreneur is untrained, conservative, republican, upper middle class +, and "has not changed his style."

The "barnyard pecking order" that we grow out of will close off any feedback channels. Ask any nurse or lawyer about medical loyalty. How to teach entrepreneurship to a physician! We cannot keep up with the science much less the art of medicine. I invite the business community to pick up where Henry Kaiser started. Make each hospital a successful business venture, and you will help this society!

Earl Sunderhaus, M.D.
Asheville, NC 28801

Dividend

The Magazine of the Graduate School of Business Administration

Volume V, No. 1

Fall, 1973

The Role of Energy in the Nation's Economy by Paul McCracken 4

Uses of energy go up, while supplies go down. What should be done? Dr. McCracken analyzes the problem and offers some suggested answers.

If I Only Had One More Minute! 8 (*Dialogue from the Tinkertoy Game*)

Certain assumptions about management and decision-making are implicit in the way people play the Tinkertoy Game. Here are brief excerpts from the analyses team members made.

Annual Meeting: The Presidents Club 12

The "greatest club on earth" held its annual meeting this year in Hale Auditorium. After the business meeting, members were treated to a surprise which was also a stirring test of the auditorium's acoustics.

Innovations in Labor Arbitration by John H. Stamm 16

A professional arbitrator discusses two new procedures that may be of profound importance to the future direction of labor relations.

Did You Say Eighty-Five Cents? 18

The 45th reunion of the MBA class of 1928 included a coffee hour in the lounge of the new Assembly Hall. Our pictures record that event.

Among Ourselves 20

James Duesenberry gives McNally lecture on inflation; Public Finance Institute is established at school; Carl Fischer retires.

School Holds Special Seminar for Associates 24

"Future Patterns of Federal Corporate Taxes" was the title of a recent seminar developed for companies who are members of the School's Associates. *Dividend* took pictures during one of the working sessions.

About the Cover

Our cover is an etching by Orié Van Rye, retired vice-president of the New England Electric System, who is by avocation an accomplished etcher. The picture, entitled "Sky Hooks," is owned by the Business School and hangs in the offices of the Division of Management Education.

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by Paul W. McCracken

Edmund Ezra Day University Professor of Business Administration

AN OVERVIEW OF THE ROLE OF

Editor's Note: A two-day National Financial and Business Writers' Conference on the Energy Outlook was held this summer under the joint sponsorship of the Graduate School of Business Administration and the Investor Relations Committee of Edison Electric Institute. The keynote address, given by Dr. Paul W. McCracken, Edmund Ezra Day University professor of business administration and former chairman of President Nixon's Council of Economic Advisers, is reprinted here. Other speakers at the conference included Alvin W. Vogtle Jr., president of the South Company and chairman of Edison Electric Institute; Congressman Mike McCormack, D.-Wash.; and Dr. Pat Shontz, economist with the Detroit News. In addition to the speakers, a panel discussion presented four different perspectives of energy economics. Panelists included John F. Schaefer, staff assistant to President Nixon in the National Energy Office; Dr. Edward J. Mitchell, U-M associate professor of business economics; David Pauly, associate editor of Newsweek magazine, and Shearon Harris, chairman and president of Carolina Power and Light Co. More than 100 financial and business news specialists attended the conference, which was held in the new Assembly Hall of the Business School.

Only a few years ago if the generally informed citizen were asked what he thought should be done about the problem of energy, he would probably have been a bit bewildered. He would, in fact, not only have been uncertain about the answer, he would have been uncertain about the question. Did the interrogator have in mind some sort of tired-blood or geriatric problem for which the answer might be more liver in the diet or some potent vitamin pills? Or what was the question?

And this would have illustrated the extent to which we were taking energy supplies completely for granted. Supplies were so abundant that the industries were delivering their products at bargain-basement prices. The consumer price index component for electricity and gas prices is now only 42 percent above its level in 1935, almost four decades earlier, while consumer prices generally rose 214 percent during that period. To put the matter another way, electricity and gas this year are costing the consumer less than half as much, relative to the prices of things in general, as they did four decades ago. For gasoline the story is even more dramatic. If we leave out of the picture gasoline taxes, which go to finance the purchase of public consumption and investment, the price of a gallon of gasoline is about the same now as in the mid-1930's, even

though the price level generally has somewhat more than tripled during that period. Or, relative to the cost of things generally, a gallon of gasoline now costs roughly one-third what it did in the prewar decade.

This is a striking performance. With prices declining relative to the value of the dollar generally, and with supplies abundant, uses of energy have grown persistently, and this has been a completely normal response to market forces at work. This is worth emphasizing because there has been too much hand-wringing and wailing about how we have wickedly wasted our energy patrimony and must now pay for our sins. We do not get far either understanding our energy problem or developing intelligent programs if we persist in these theological or demonological explanations.

The Demand for Energy

We do now have a problem, and in evaluating it we must keep certain things in mind. First, we must assume that demands for energy will continue to enlarge further in the years ahead. While serious questions about the desirability of further economic growth have been raised at the academic level, there is little evidence that the average family is ready to take the vows of the Club

ENERGY IN THE NATION'S ECONOMY

of Rome. The "improvement factor" in wage contracts and aspirations for further improvements in material levels of living are still strongly embedded in our thinking. If economic growth is to continue, increasing amounts of energy will certainly be required. Thus far in this century we have seen a nine-fold increase in energy used, averaging 3.2 percent per year. If this trend were to continue, our energy requirements by the year 1985 would be roughly 50 percent larger than what they are now.

Suppose the demand for energy were to accelerate. What then?

These are not idle questions. From the early 1920's to the mid-1960's a slow decline in energy required per unit of output occurred. This brought energy required per dollar of real GNP (in 1958 prices) from 147,000 BTU's in 1920, as the table indicates, to 86,300 in 1965. (The actual low year was 1966, with 85,700 BTU's.) Since the mid-1960's there has been a slow rise back to about the 90,000 level. Now here is a part of our problem today. If the long-term downward trend in energy required per unit of output that prevailed from about 1920 to 1965 had continued, our uses of energy would be at least 10 percent lower today than is actually the case. One of the important but

TABLE 1
U.S. Real GNP and Energy Inputs

Year	GNP ^a	BTU's of Energy Inputs	
		Total ^b	Per \$ GNP
1900	\$ 75.5	7,600	101,000
1910	120.1	14,800	123,500
1920	140.0	20,600	147,000
1930	183.5	21,400	116,500
1940	227.2	24,200	106,500
1950	355.3	34,000	96,000
1960	487.7	44,600	91,400
1965	617.8	53,300	86,300
1970	722.1	67,400	93,600
1971	741.7	69,000	93,000

Source: Historical Statistics of the United States, Colonial Times to 1957" (Census, 1960), pp. 354-55; "United States Energy Through the Year 2000" (Interior, 1972), p. 13; Economic Report of the President, January, 1973, pp. 194-96; "Long-Term Economic Growth, 1860-1965" (Census, 1966), pp. 166-67.

^aIn billions, 1958 dollars.

^bIn trillions.

unanswered questions is whether energy requirements per unit of output by 1980 or 1985 will be back on the path of the declining trend prevailing prior to the mid-1960's, whether we are on a rising trend now, or whether we are on a declining trend that has, however, shifted to a higher level. These alternative assumptions make large differences in the projected energy requirements for 1980, giving a range of requirements from 85,000 trillion BTU's on the low side to 120,000 trillion BTU's at the high end of the

range. Most projections are in the middle of this zone. The Department of Interior, for example, projects a figure of 96,000 trillion BTU's, about the same as a projection by the Shell Oil Company, but the National Petroleum Council is somewhat higher at 103,000.¹

¹"United States Energy Through The Year 2000," op. cit., p. 21; "U.S. Energy Outlook" (National Petroleum Council, 1971), Volume 1, p. 21; "The National Energy Outlook" (Shell, 1972), pp. 10-11.

The first point to emphasize, therefore, is that energy requirements will continue to enlarge substantially and there is a substantial margin of uncertainty about the magnitude of that increment needed. It is, however, unlikely that the growth in our energy requirements during this decade will be much below 50 percent.

The second basic point to keep firmly in mind is that oil is going to be called upon for much of this needed increase, and if we were to continue to rock along as in recent years these increased oil requirements would be large. Oil must be the source of much of the increased energy requirement for several reasons. One is that coal, a major alternative source of energy, has not been a growth industry. During the decade of the 1960's coal production increased 3.8 percent per year, but even with this exceptionally rapid growth its share of our total energy sources was declining. And in 1972 we produced 590 million tons of soft coal, only 14 percent more than in

TABLE 2

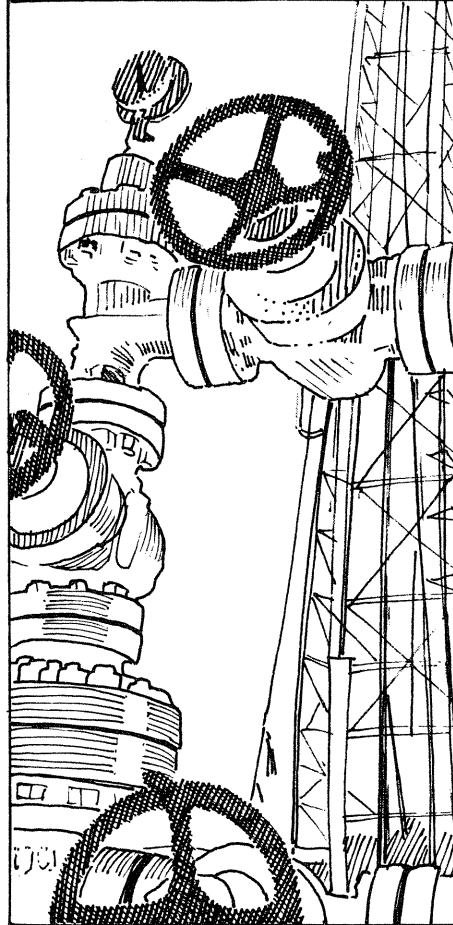
U.S. Output of Bituminous Coal
(In million tons)

Year	Tons
1950	516
1955	465
1960	416
1965	512
1970	603
1971	552
1972	590

Source: 1971 Business Statistics (Commerce, 1971), p. 165 and Survey of Current Business, May 1973, pp. S-34-35.

1950. The main reason for the decline in coal's share of our total energy sources, of course, is that our environmental requirements escalated far more rapidly than the technology of burning coal more cleanly, with the result that large stationary users of fuel have been forced to convert from coal to oil. Thus for the near term, at least, coal's share will decline

“In general, those economies where rules, permits, regulations and directives take over from the pricing system tend also to be those where graft, pull, and under-the-table procedures abound.”



further, and these near-term developments do not create incentives for the developmental work necessary if down the way our ample reserves of coal are to play a relatively larger role in the energy picture. Unless unusual measures are taken immediately, and this is quite unlikely, the declining trend in coal's share will accelerate further.

As for nuclear energy, even a large expansion here still leaves it accounting for a share well below 10 percent of our energy requirements by 1980. And this still assumes that nuclear power will provide for something like one-quarter of the

increase in our energy requirements during the 1970's.

TABLE 3
Projected Share of Energy Requirements
1971 and 1980

Source	1971	1980	
		Interior	N.P.C.
Petroleum	44.1%	43.9%	46.2%
Natural Gas	33.0	28.1	21.4
Coal	18.2	16.8	19.5
Hydropower	4.1	4.2	2.9
Nuclear	0.6	7.0	9.2
Other	—	—	0.8
Total	100.0%	100.0%	100.0%

Source: "United States Energy Through the Year 2000" (Interior, 1972), pp. 22-23; "U.S. Energy Outlook" (National Petroleum Council, 1971), p. 13.

Petroleum, our major source of energy, must therefore carry close to half of the requirements for increased energy needs. By 1980 Interior projects petroleum's share at 44 percent, down only slightly from the beginning of the decade. The National Petroleum Council's projected share is 46 percent for petroleum, and their projected total energy requirements are also slightly larger. If something like these

TABLE 4

Domestic Demand for Petroleum
(Million barrels per day)

Source	1970	1980	
		Interior	N.P.C.
U.S. production ^a	11.3	10.2	9.8
North Slope	—	1.5	2.0
Imports	3.4	9.1	10.7
Total	14.7	20.8	22.7

Source: See Table 2.

^aLower 48 states.

projections are to be realized, domestic petroleum consumption will rise from last year's 16.2 million barrels per day to 21-23 million by the end of the decade.

This brings us to the third point. Virtually all of this increase, unless some major new domestic fields are discovered, must be imported. Domestic production has levelled out. And this seems to mean at least a tripling of our imports if North Slope oil is then available. If it is not available, the import requirements are that much larger. Moreover, most of the additional oil will have to come from the Middle East because that is where the oil is.

TABLE 5
World "Published Proved"
Oil Reserves
at the End of 1972

Area	Billion Bbls.	Percent Total
U.S.A.	43.1	6.2%
Canada	9.7	1.4
Caribbean	17.2	2.7
Other Western Hemisphere	15.5	2.3
Western Europe	12.6	1.9
Africa	106.4	15.3
Middle East	355.3	53.3
Other	112.9	16.9
Total	672.7	100.0%

Some Guidelines

There are, I believe some guidelines from the discipline of economics that can be helpful in shaping the elements of our energy policy for the years ahead. They are not startling, but they can be useful. One is the principle of increasing costs (or diminishing returns). It is an eminently reasonable proposition—namely, that beyond some point each successive increment of benefit is apt to come at greater cost. At some point the achievement of another unit of benefit will require such a large cost that these resources could then better be used in some other

direction. Beyond some point, for example, the grass in the lawn might look still a little better with more labor, but the total result may be better to sign off on grass and use the remaining energy for pruning trees or weeding the flower beds—or playing golf.

A second point is that there are strong advantages in using the pricing system where it is possible. If something becomes scarce relative to demand and we try to discourage its use by regulations and rules, leaving the price unchanged, the individual's interest is in the direction of evading the rules if he can. At the unchanged price he "optimizes" his situation by consuming more if he can. This is why those with relatively informal standards of morality are never bothered by direct rules for rationing as much as the ordinary citizen. The former can usually find ways to take care of their own needs. Indeed, one can go further. In general, those economies where rules, regulations, permits, and directives take over from the pricing system tend also to be those where graft, pull, and under-the-table procedures abound. And it is the citizen who is reluctant to play these games that gets the short end of the stick.

There is an essential morality about the pricing system that is as important as it is usually ignored.

If, on the other hand, the price

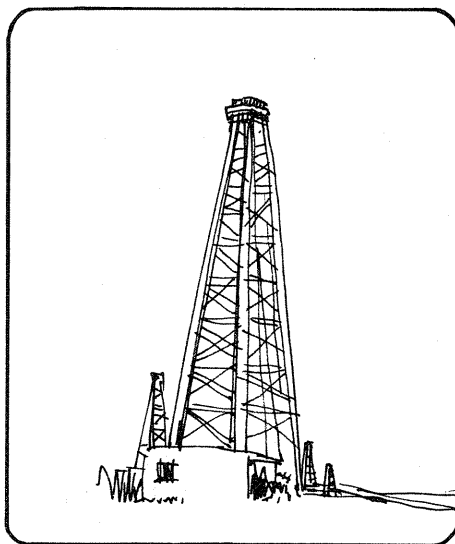
of a scarce item is allowed to rise, it becomes in the citizen's interest to do what is also in the social interest—namely, to use the relatively scarce item more sparingly. Private incentives then get aimed in the direction that social policy wants to move. And the difference between the aggregate of millions of plans and decisions aimed in the direction of accommodating the social interest and the situation where these plans and decisions are aimed in the direction of thwarting the social objective is always far greater than is expected in advance.*

A third point to bear in mind here, though this is not unique to the discipline of economics, is that actions to deal with our energy problem take a lot of time to reach fruition. To remedy our shortage of refinery capacity, even with expeditious work to relieve siting problems, will probably take 3-5 years. From the initial decision to bringing a nuclear generating plant on line takes longer still. The lag times here are long. We can interrupt forward planning of the energy industry, as we have, and see no ill effects for years because earlier projects continue to mature, but it will also take years after the light turns green before the shortages of capacity we have created will begin to fade.

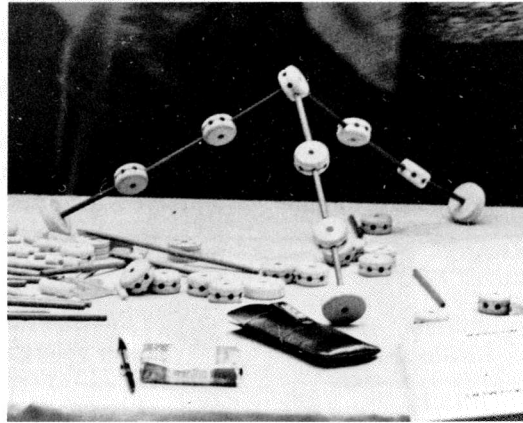
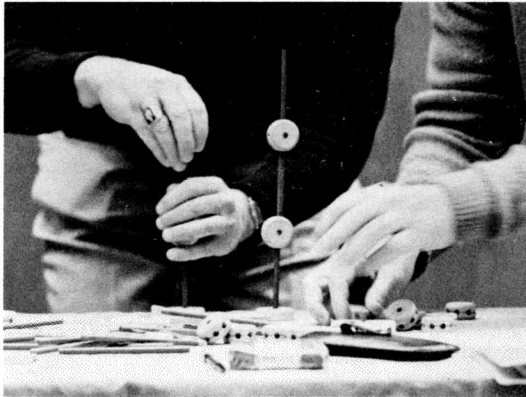
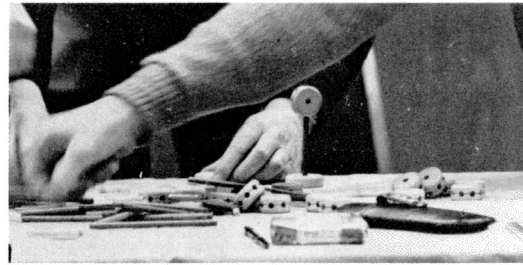
Implications for National Policy

What, then, are the implications of all of this for national energy policy? While the subject has not yet come into focus sharply enough to talk about a national energy policy, some elements can be identified now. For one thing, we need a large increase in the price of natural gas immediately. Actually, these prices should be decontrolled. Price controls here have led to predictable results. Uneconomic uses of this exotic fuel have been encouraged (e.g., generating electricity within the

Continued on page 27



*Some of these paragraphs were also used in a Wall Street Journal article, Tuesday, June 19, 1973, p. 22.



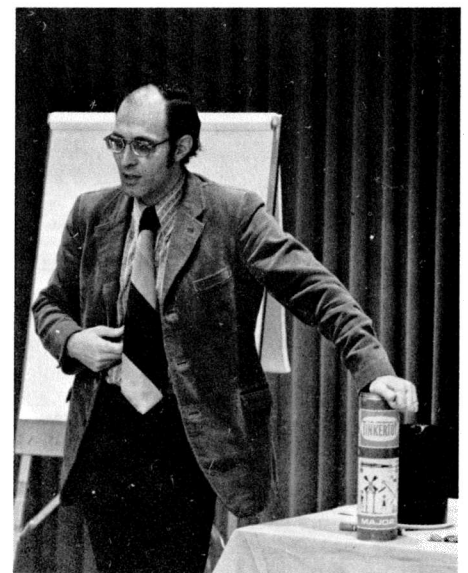
If I Only Had One More Minute!

Dialogue from the Tinkertoy Game

The Tinkertoy Game provides a way to confront people with their assumptions about management and decision making. It was originated in 1963 by J. B. Ritchie, associate professor of industrial relations, with a colleague from Berkeley. Instructions for the game are simple: "You are to build the tallest self-supporting structure you can, using one box of Tinkertoys. You have ten minutes to plan with your teammates what you will build and how. During this ten minutes, you may handle the Tinkertoys but you may not put any of the pieces together. After the planning session, you will have 40 seconds to build the structure. You will be given starting and stopping times, and that's all."

At a recent seminar entitled "New Frontiers of Management" and sponsored by the Bureau of Industrial Relations of the Graduate School of Business Administration, Ritchie gave the Tinkertoy Game to three teams of managers attending the seminar. The managers were from the Social Security Office, the Ford Motor Company, Shell Oil, Caterpillar Tractor, IBM, Kodak and Fiber Industries Inc. *Dividend* was there to take pictures and to tape the two hour discussion. What follows are brief excerpts from the analyses team members made of their planning and their actions, along with some of the conclusions they drew about how this applied to management.

Photos by Duke Campbell



J. B. Ritchie gives instructions.

Team 1—"Except for" is the Very Issue

Al: Our team had several ideas about how the tower should be built. In fact, we had many ideas and many of them conflicted. Some of us wanted to use metal pieces, others wooden pieces, some wanted to use the little plastic connectors, etc. Then we asked what kind of a base do you want, how big should the base be, and we spent a lot of time on the base. So that there were a lot of decisions that had to be made, and they were difficult to come to with four different opinions.

Ben: One of the things I observed (and I've been through this game before) is that for better than half of our ten minutes no one made any attempt to organize the group whatsoever. Everybody just sat there and said "just put that together and this together." They didn't spend any time at all on how you build the structure. I finally said, "Don't you think we need a base on this?"

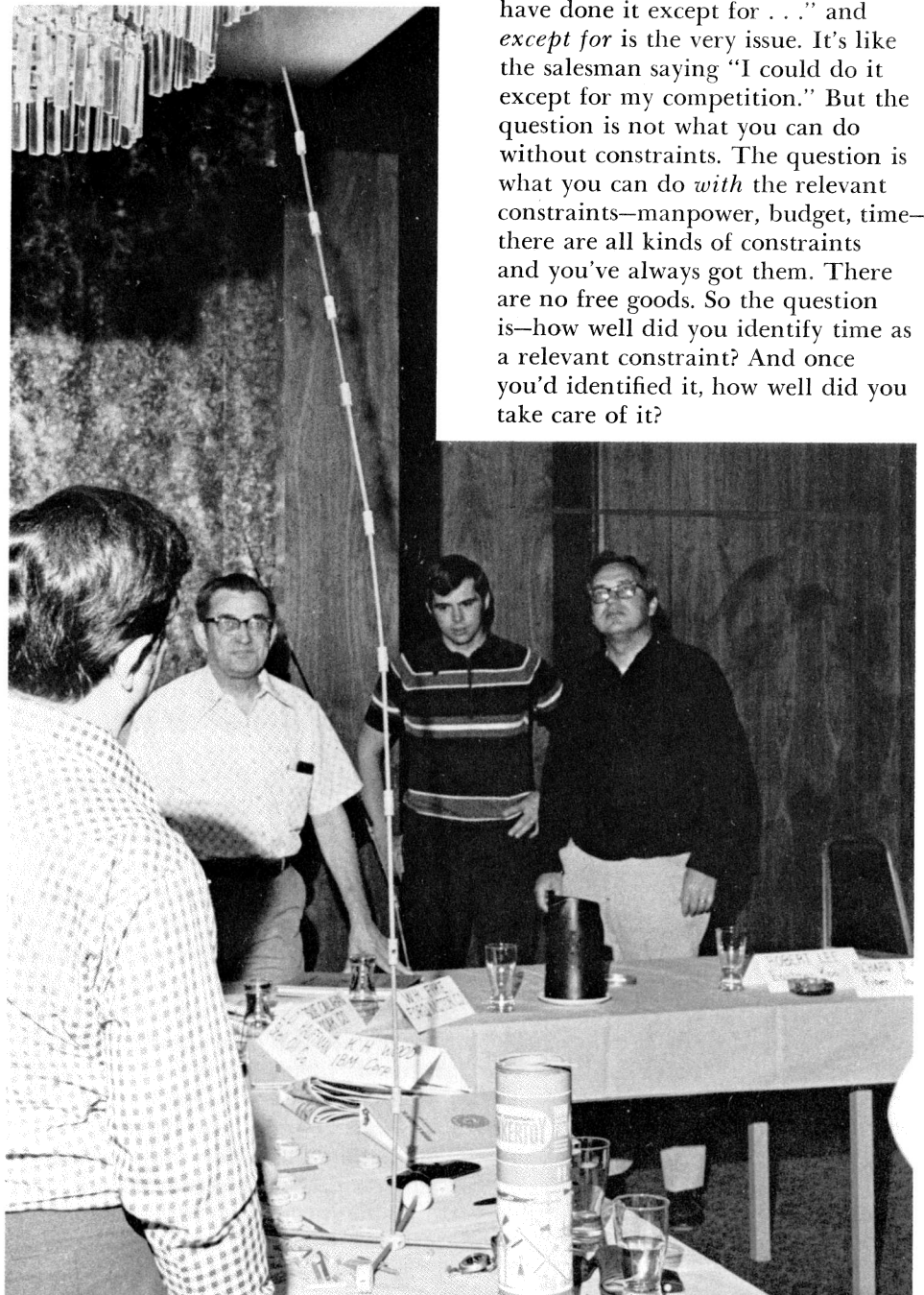
Ritchie: Would you be willing to generalize from that? Is there anything we can learn from that in a broader sense?

Ben: Looking at it in depth, I think one of the common things you see with people doing something like this is not looking at it in the sense of *how do we use our individual talents to accomplish the task?* and specifically *what would we need to do, each of us here, in order to get the building up?* Rather, people seem to look at it in the sense of *let's just throw it all together.* I know from before that the timekeeper became very important. Without being aware of time, you lose almost automatically.

Ritchie: That's true. Almost every successful group (and by successful I mean one that gets their structure to five feet) has a timekeeper. I make it very explicit in the instructions that I will give starting and stopping times and *that's all.* Another thing about successful groups

is that they have a sequential logic where the thing gets built as it goes, and they have a timekeeper who counts off, so that the team always knows what time frame it's in. What happens when teams don't appoint a timekeeper is that the 40 seconds runs out and everything is scattered horizontally on the floor. The question is *why* didn't you have a timekeeper, if you didn't? Or, in a broader sense,

why don't people account for those kinds of variables? I would argue that the most significant variable in this exercise is time. How well did you predict, and how well did you deal with time? See, the task is not to build the tallest self-supporting structure. The task is to build the tallest self-supporting structure *in 40 seconds.* There's a real difference. And the difference explains a lot about incompetent management—that is, the inability to identify the relevant variable and the relevant constraints that are operating on your system. So often I've heard, "I could have done it except for . . ." and *except for* is the very issue. It's like the salesman saying "I could do it except for my competition." But the question is not what you can do without constraints. The question is what you can do *with* the relevant constraints—manpower, budget, time—there are all kinds of constraints and you've always got them. There are no free goods. So the question is—how well did you identify time as a relevant constraint? And once you'd identified it, how well did you take care of it?





Team 2—What Was the Goal?

Dan: One important aspect was the specific issue of not discussing at all what the goal was. If that had been discussed, we would have had to decide whether time was important or height was important. This should have been the first order of business, and was not done at all.

Bob: I think we pretty much understood what the goal was.

Dan: Separately, but we didn't discuss it at all.

Ritchie: Well, what did you understand? What did you think the goal was?

Bob: To get the highest free standing structure in forty seconds.

Ritchie: Yes, that's good as far as it goes, but you've got to be more explicit. That's like saying "Our goal is to be successful." The goal has to relate back to some operational kinds of reference points that everybody understands.

Bob: We understood that to get the highest structure we had to join the longest pieces together. That was agreed to.

Ritchie: But if all those pieces were put together they wouldn't stand.

Bob: We also discussed how to support. The heavier pieces toward the bottom, and the lighter pieces toward the top, and all of that.

Ritchie: It still won't work. You still can't make it stand. My point is, in terms of the goal issue, if you just say "maximize it" and you just keep sticking pieces in, it won't stand. It'll get top heavy.

Bob: Well, it probably would have, but that was the way we were approaching it.

Dan: One thing I think I saw happening here was some kind of reluctance on the part of any individual to really assume leadership of the group.

Ritchie: If someone had asserted leadership, you might not have listened. That's a very common problem.

Mary: We would have listened. We did discuss a common thing at first, but when we started executing it

we lost sight of it. We forgot that it didn't matter whether I put all these pieces together with the red connectors. What mattered was to get them all together—free standing as one thing. So I think in executing we did lose sight of the goal—although we did discuss the goal.

Dan: We had a procedure that would have worked except for the time pressure. And decision-making frequently has a time frame attached to it.

Ritchie: Did you ever have a decision that did not have any constraints?

Dan: No. But what happened here is we became engrossed in assembling pieces using the modular theory—putting various pieces together. And as a result of concentrating on what each of us had as assignments, we lost track of the time frame. Had we had a timekeeper calling out 10 seconds, 5 seconds, etc., we would have known at the end of 30 seconds to *quit assembling* and put it all up by pre-arrangement. Then maybe we would have gotten to five feet.

Team 3—To Act Rather Than Think?

Ed: Isn't one of the keys here that each member of the group should have an assignment? And that he should work simultaneously with the other guys? Isn't that one of the keys to success?

Ritchie: Really what we can do here is articulate all of the principles of management that any of us have ever dealt with. In terms of division of labor, coordination of a task, specifying an understood task, directing, controlling, etc. They're all here. Aren't they? And out of this can come a series of guidelines. The argument here was that it would have been better with a leader. Is that a common perception?

John: Not necessarily.

Ed: What happened in our group is that John proposed a solution to the problem and I listened to him and we said "That sounds logical to us so let's do it."

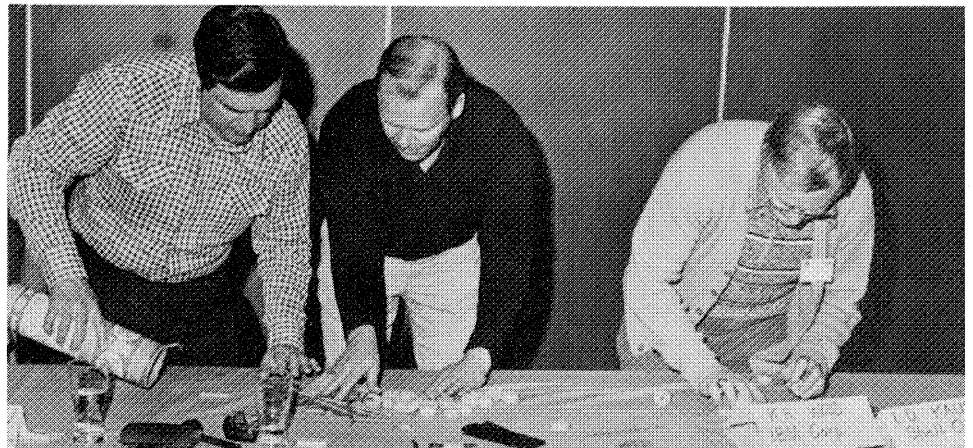
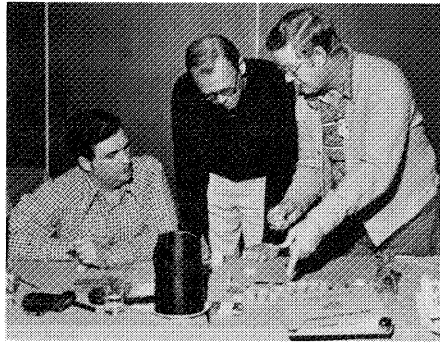
John: It was the wrong solution, too. (Laughter)

Ken: Another thing this game points up is the need to functionalize your activities. You have here an engineering problem, a parts available problem and a construction problem. So I think you should break those down and assign those tasks and you'll come up with a better answer, considering the time constraints.

Ed: You know, we could have afforded to spend nine of our ten minutes just discussing the possible solution and never mind who picked up what pieces. Because once you got the idea down pat you could almost hand over hand it.

Ken: That's right. Once we got the concept, the organization of the task itself would have only taken a minute.

Ritchie: That's a significant point. Not that the organization didn't need to be done, but that it could be done so easily once the concept was clear. Isn't there an imperative that underlies a lot of what we're saying here? An imperative to *act* rather than to *think*? Most people feel that it's far



more important to be seen participating, acting, doing things, than it is to do what Ken and Ed were suggesting. That is, to think through the components—the design logic, the construction logic. To think through the logic of what will hold what and what time is it going to take us to do this? And if you really think about it, you realize that to build any base other than just a star—a flat star, is going to take up virtually all your time. We have an ethic that says it's not good just to be sitting there

thinking and talking—we've got to do something. And the only way that ever gets curtailed is to superimpose, by a conscious effort, your will.

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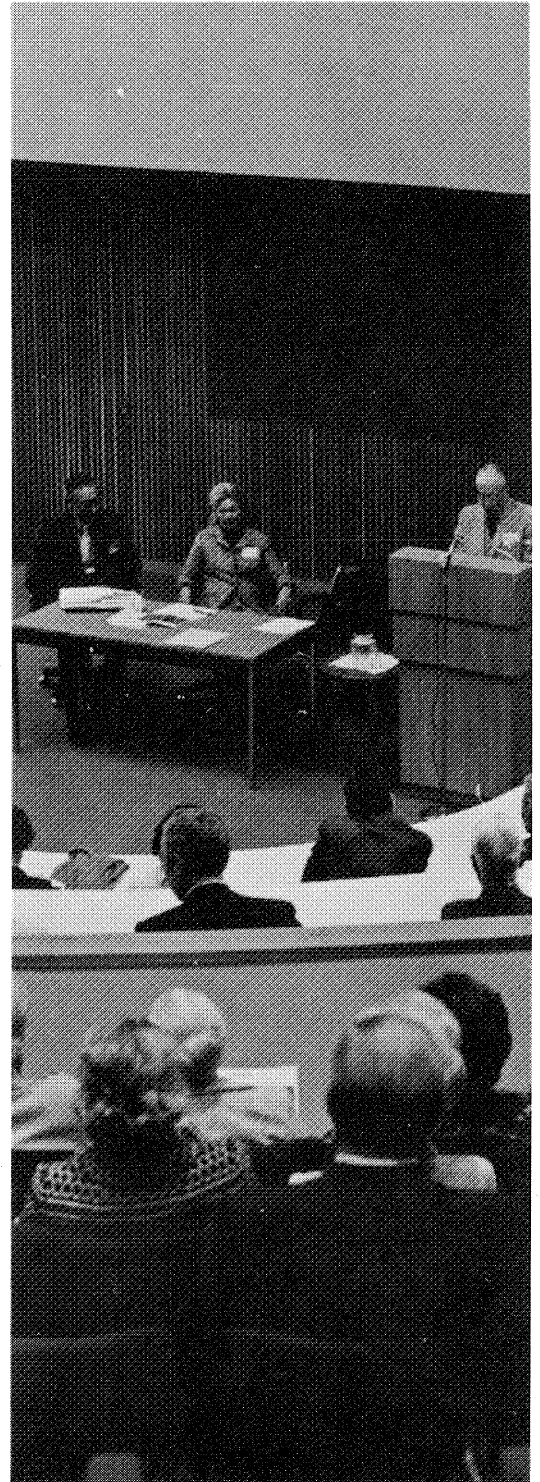
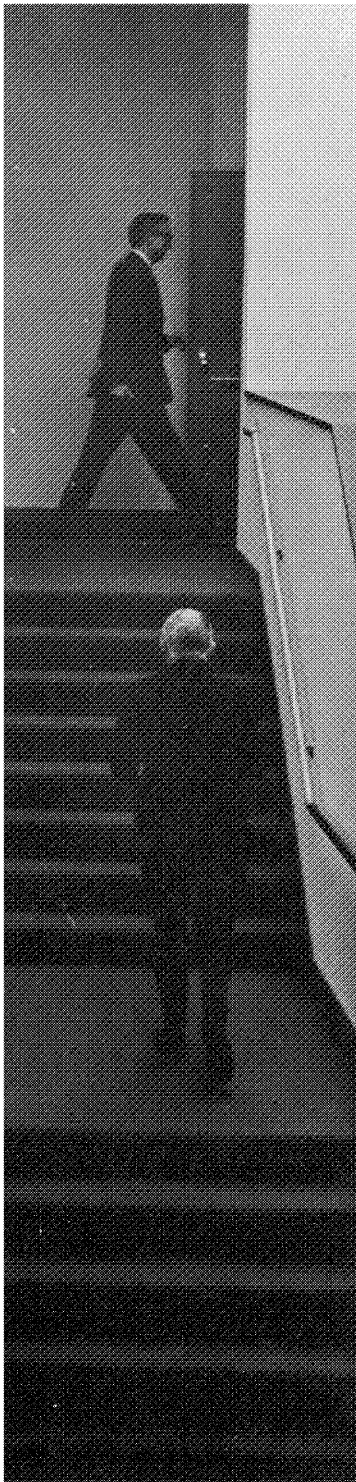
Ritchie: To sum up, do you think this exercise is a reasonable and accurate simulation of actual organizational processes?

Bob: It's all too true. It's a good reminder of how we actually behave. But it's easier to see it here, with the Tinkertoys, than it is to see it on the job.



Annual Meeting: The Presidents' Club

If you had been walking down the corridor of the Assembly Hall shortly before the annual meeting of the Presidents Club, you might have heard exquisite violin music coming from an office. An office? Yes, as that was where Gordon Staples, Concertmaster of the Detroit Symphony Orchestra, was practicing Bach's *Praeludium* which he was to play in a surprise appearance at the Presidents Club annual business meeting, held this year in Hale Auditorium.



The annual meeting took place immediately following a social hour in the new Assembly Hall lounge. Alex Miller, president of the Presidents Club, presided. Dean Floyd A. Bond gave a brief talk in which he welcomed members of the Presidents Club to the new Assembly Hall, and pointed out that the building is in constant use (in fact, a class was being held in the case discussion section of Hale Auditorium until just before the Presidents Club meeting). He mentioned that no public funds of

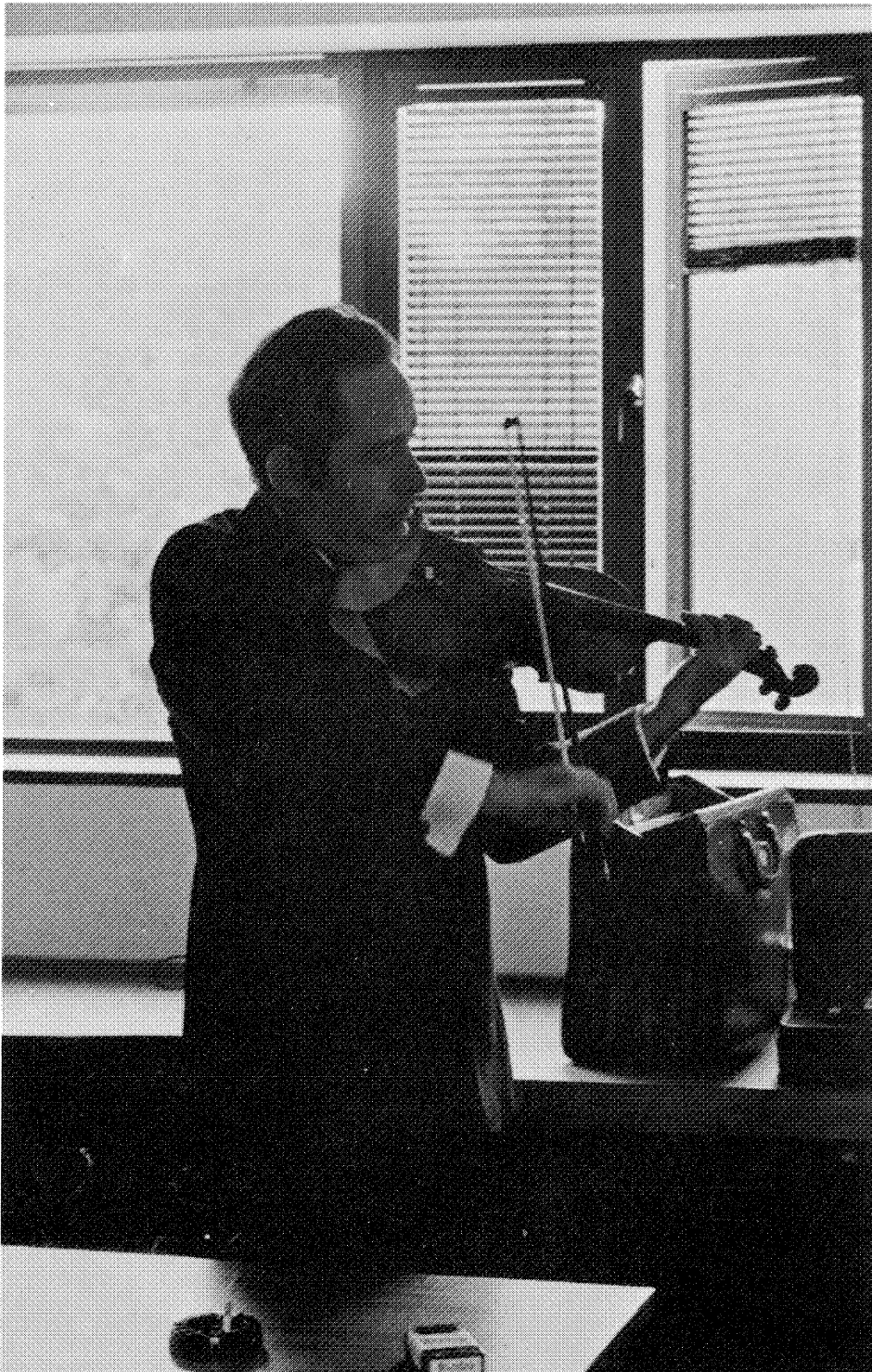
any kind were used in the construction, furnishing or landscaping of the Assembly Hall, and added that the building is used for regular degree programs during the academic year and for month-long management development programs during the summer. He commented also on the public misconception that business schools throughout the country are recipients of a great deal of private money. Not so, said Dean Bond, quoting a study done in the 1960s by the Council for Financial

Aid to Education. The study found that although close to 20% of students attending institutions of higher education are going to business schools, only 1.8% of individual and corporate gifts to institutions of higher education go to business schools. At the conclusion of his talk, Dean Bond introduced Clayton Hale, the donor of Hale Auditorium, and Leland J. Kalmbach, who, along with his son, Dohn, donated the Kalmbach Management Center to the Business School.

Before beginning the business session of the meeting, President Alex Miller quoted some interesting statistics about the "greatest club on earth." It consists of a spectacular 1289 members, 104 of whom are new this year. In all, members of the Presidents Club are responsible for gifts and pledges to the University totaling \$36 million dollars!

Following the business meeting, Gail Rector, president of the University Musical Society, spoke about the musical society and its 94 eventful years. And as a glorious surprise, he introduced Gordon Staples, guest virtuoso, whose skilled performance on a rare violin gave the acoustics in Hale Auditorium a stirring test. This was the first time a musical program had been presented in Hale Auditorium, and when Mr. Staples had finished playing he pronounced the acoustics "wonderful."

The annual meeting began an
Continued on back cover



Pictured from left to right: Dean Bond strides into Hale Auditorium as the Presidents Club meeting begins; Leland J. Kalmbach (center) discusses a point with Raymond T. Perring at the social hour before the meeting; Alex Miller opens the business meeting in Hale Auditorium; Gordon Staples, Concertmaster of the Detroit Symphony Orchestra, rehearses Bach's *Praeludium* in an office in the Assembly Hall just before his appearance at the Presidents Club annual meeting.

Photos by Stuart G. Abbey

Alex Miller, president of the Presidents Club, goes over last year's details before the beginning of the annual meeting. Mr. Miller is chairman of the board of the Columbia Iron and Metal Co.

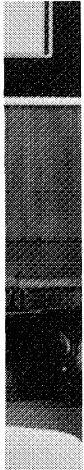


Raymond T. Perring, chairman of the board of the Detroit Bank and Trust Company (left) chats with Alex Miller and Leland J. Kalmbach (right) honorary chairman of the board of the Massachusetts Mutual Life Insurance Company.



Allen P. Britton, Dean of the School of Music (right foreground)

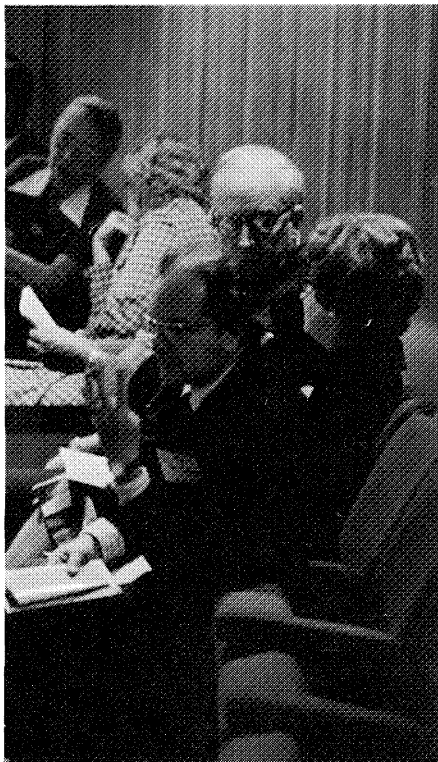
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Left, Mrs. Ernest A. (Marian) Jones, chairman of the planning committee for the Club's annual meeting.



Left, D. M. Phelps, professor emeritus of marketing, greets a friend.



Clayton G. Hale, chairman of The Hale and Hale Company, and his wife were in the audience. Mr. Hale is the donor of Hale Auditorium where the meeting was held.



Gail W. Rector, president of the University Musical Society, talks with Marian Jones during the coffee hour before the meeting.

round) has a word with a colleague.

Innovations in Labor Arbitration

by John H. Stamm

A professional arbitrator discusses two new procedures that may be profoundly important to the future direction of labor relations in this country.

In March, 1973 an unprecedented agreement between the United Steelworkers and ten steel companies was announced—an agreement that may have a profound impact upon the future direction of labor relations in this country.

With over a year remaining in their current contracts, the parties have agreed to use binding arbitration for those issues which are not resolved during the 1974 national steel negotiations. The use of a strike by the union or lockout by the companies is prohibited. This new procedure virtually assures labor peace in the basic steel industry through July, 1977.

The use of arbitration to resolve impasses or disputes resulting from a breakdown in negotiation of the collective bargaining agreement is called *interest arbitration* and is highly controversial. Traditionally, arbitration has been used to resolve grievance disputes over the interpretation or application of an existing agreement. Interest arbitration is used to establish the terms and provisions of the agreement itself.

Historically, labor and management have preferred to resolve negotiation impasses by means other than arbitration, and viewed arbitration of interest disputes as the beginning of the end for free collective bargaining. On rare occasions, interest

arbitration has been used in the private sector. However, the use of economic force in the form of a strike was clearly preferred.

Since the mid-sixties a number of states have adopted compulsory arbitration of interest disputes involving policemen and fire fighters. The importance of continued protective services made it necessary to develop a viable alternative to strike action. Although the use of interest arbitration was slowly increasing in the public sector through statutory compulsion, the private sector remained steadfast in opposition to such dispute resolution. The steel agreement has changed that.

About the author: John H. Stamm is a professional arbitrator, a member of the national labor panels of the American Arbitration Association and the Federal Mediation and Conciliation Service, and has chaired interest arbitration panels for the State of Michigan. He is also a charter member of the Society of Professionals in Dispute Resolution. He has his D.B.A. from Harvard, and joined the Business School faculty in 1969 where he teaches courses in the organizational behavior and industrial relations area. He has previously taught in the Harvard Trade Union program.

The parties entered into this agreement because of the economic hardships resulting from deadlocked contract negotiations in the past. Although there has not been a nationwide steel strike since 1959, the potential of a strike shutdown has contributed to heavy imports of steel and inefficiencies in domestic production.

While the agreement does give local unions the right to strike over local issues, the parties agree that local strikes would have minimal effect on the industry. Therefore, the agreement serves to assure customers of continued domestic production and enables increased production through stability of operations.

The agreement provides for continuation of certain economic benefits during the term of the next contract as well as minimum wage increases of 3% a year and a one-time bonus payment. Actual negotiation of the 1974 contract is required to begin no later than February 1, 1974 with the present agreement expiring on July 31, 1974. After April 15, 1974 all unresolved contract issues are submitted to an arbitration board of five members. The decision of the board must be rendered on or before July 10, 1974. The parties presently talk of completing the 1974 contract without resorting to arbitration and

view the time-table aspect of the agreement as a constructive move away from crisis bargaining.

Already this agreement is having an effect upon the labor relations field. The newly formed National Commission for Industrial Peace is currently attempting to induce labor and management leaders in the maritime, trucking, and railroad industries to experiment with voluntary strike-prevention agreements similar to the steel industry's. The Commission hopes this development will result in the process of collective bargaining becoming increasingly one of reason and persuasion and less of economic force. The extent to which such voluntary solutions to bargaining disputes will be adopted may well depend upon the 1974 steel industry negotiations. Negotiation of the new contract will be closely scrutinized by the labor-management community.

Negotiations in the steel industry have been responsible for another recent innovation in the arbitration field called *expedited arbitration*. This procedure was developed in answer to complaints that traditional grievance disputes arbitration was too time consuming, too costly, and too cumbersome.

It is not unusual for more than a year to elapse between the filing of a grievance and the arbitrator's decision resolving that dispute. A one-day arbitration hearing may easily cost each party \$1,000 or more. In addition to the arbitrator's fee and expense, a formal approach also results in the use of attorneys, a transcript of the hearing, the filing of briefs, etc. Each of these additions adds to costs and delays final resolution of the grievance. High costs discourage the use of arbitration and excessive delay may render the procedure meaningless to the employee involved. Increased formality exacerbates both cost and time problems.

Dissatisfaction with the aspects of arbitration described above has been expressed for over a decade. If ignored, such criticism could very well threaten future reliance upon arbitration as an effective means of resolving labor-management grievance disputes. In turn such a development would threaten the stability we experi-

ence during the duration of labor agreements.

The above dissatisfactions were voiced by the United Steelworkers during their 1971 negotiations with the steel industry. The time delay especially was causing much frustration among the rank and file. In response to the discontent engendered by the arbitration procedure, local union officials pressured national officers to eliminate the no-strike clause, thus allowing a strike to be used in place of arbitration. The negotiators considered the underlying problem but did not grant the right to strike during the term of the agreement.

Instead, the parties negotiated an experimental two year procedure

“The parties entered into this agreement because of the economic hardships which resulted from deadlocked contract negotiations in the past.”

designed for faster, more efficient and more economical handling of routine arbitration cases. This expedited arbitration procedure was supplemental to the conventional arbitration procedures in the parties' agreements and explicitly was not to be used for complex cases. In addition to expediting routine cases, it was hoped that this new procedure would reduce some of the pressure in the arbitration system.

The expedited arbitration procedure in the steel industry requires mutual agreement in order to be used. Labor and management agree to a time and place for the arbitration and notify a member of a regionally established arbitration panel. Selection of the arbitrator from the panel is strictly on a rotational basis and if the arbitrator is unable to meet the parties' schedule the next panel member in rotation is notified.

The procedure requires that the hearing must be informal. No briefs are filed, nor is a transcript made. Local union and management representatives rather than lawyers or

corporate labor relations specialists must present the dispute to the arbitrator. The arbitrator is required to issue his decision within 48 hours of the close of the hearing.

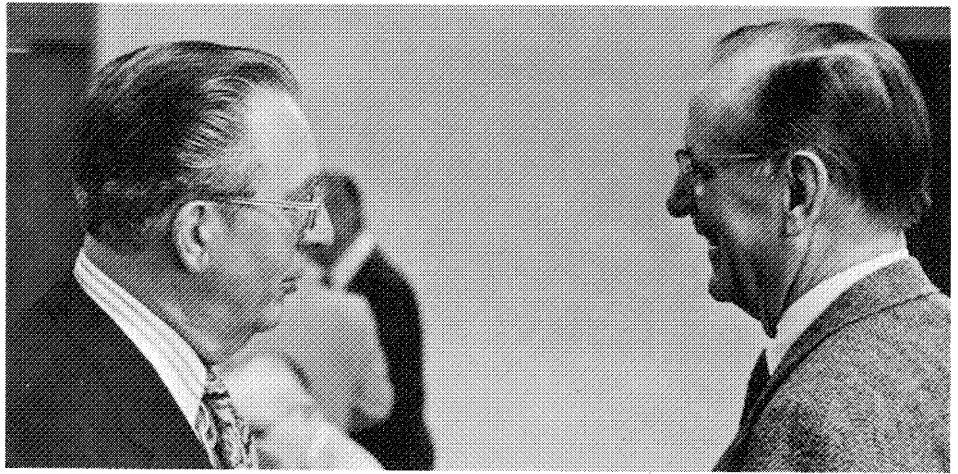
The arbitrator's decision must include a brief explanation of the basis for his ruling but is not to resemble the more traditional and lengthy opinion and award. The decision is binding upon the parties but it may not be cited as precedent in future cases. The total costs for use of this expedited procedure, including preparation of the decision, amount to \$150 per day of hearing or \$100 per half-day. The costs are borne equally by the company and the local union.

To date there is insufficient data upon which to base a final evaluation of the steel industry's experience with expedited arbitration. Available data indicate satisfaction with the procedure in meeting the deficiencies of conventional labor arbitration. Recently, at the conclusion of the two year experimental period, the Steelworkers and the steel industry pronounced the venture to be very successful and extended their expedited arbitration procedure to August 1, 1975.

In addition to the steel industry, a limited number of other company and industry groups have established some form of expedited arbitration procedures. The American Arbitration Association, after experimenting in many of its regional offices, issued Expedited Labor Arbitration Rules in January, 1973. The rules are not identical to those of the steel industry but they are similar and are explicitly aimed at increasing concern over rising costs and delays in grievance arbitration. This has made expedited arbitration available for use in many labor-management relationships.

The innovation of expedited arbitration should allow parties to tailor the procedure to their specific needs. While parties must be willing to forgo certain traditional procedures in order to save time and cost, wise implementation and use will enhance the arbitration process and at least partially answer some of the dysfunctional aspects of conventional arbitration.

Right, Stan Ford, retired appliance company executive, and D. Maynard Phelps, professor emeritus of marketing. Below, Ed and Donna Snell (left) greet Bob and Maxine Briggs. Snell is a retired Buick executive and Briggs is the former banking commissioner for the State of Michigan. Below right, Forest Brimacombe, who is with the U.S. government in the finance area, shares old times with Evelyn Burke, retired secretary-treasurer of the Edwards Bros. Printing Corp.



*Did you say
eighty-five
cents?*



Bert Wertman, consultant to Touche Ross and Co., and Margaret B. Tracy, professor emeritus of personnel management.

“Class Banquet at the Haunted Tavern, 417 East Huron Street. This place is noted for tasty food and this banquet is guaranteed. Price 85¢. Master of ceremonies: Bert Wertman. Speaker: William Andrew Paton (He won’t be too serious). Three big features besides many other things all for 85¢.”

As you may have guessed, the paragraph above was written some time ago—forty years ago, to be exact. It advertised the fifth reunion of the MBA class of 1928 and was dated June 10, 1933. The 45th reunion of the same class was held in May, 1973, and the class dinner was at the Michigan Union. The price was more than 85¢. Another event scheduled for the class was a coffee hour in the lounge of the new Assembly Hall, and pictures on these pages record that event.

Photos by Stuart G. Abbey



Top left, Herbert F. Taggart, professor emeritus of accounting, and Curtiss Armstrong, retired automobile executive. Center, Paul McCracken, Edmund Ezra Day University Professor of Business Administration, and (around the table from top left) Maxine Briggs, Bob Briggs and Milt Bosley, retired vice-president, National Bank of Detroit. Below left, William A. Paton, professor emeritus of accounting, introduces Dean Bond (right) to Bob Jaros, retired vice-president of Abbott Laboratories.

Among Ourselves

An informal collection of items, including news of the faculty, of alumni, and of the school, and assorted other information, opinion or comment that we think will interest you.

Can We Control Inflation? is Topic of McNally Lecture

James S. Duesenberry, professor of economics and chairman of the department of economics at Harvard University, spoke on "Can We Control Inflation?" at the eighth annual McNally Memorial Lecture, held September 20 in Hale Auditorium. He was introduced by Paul W. McCracken, Edmund Ezra Day University Professor of Business Administration. Dean Bond, chairman of the university committee and architect of the lecture series, presided.

Dr. Duesenberry has served on the faculty at the University of Michigan, Massachusetts Institute of Technology and Harvard University. He was the Fulbright Research Professor at Cambridge University in 1954-55 and the Ford Foundation Research Professor in 1958-59. During the mid-sixties, he served as a member of the President's Council of Economic Advisers. Among his publications are: *Income, Saving and the Theory of Consumer Behavior*; *Business Cycles and Economic Growth*; and *Money and Credit: Impact and Control*.

The McNally Lectures honor the memory of Regent William K. McNally and are supported by an endowment fund established by his friends to perpetuate his name. The lectures are sponsored by the Graduate School of Business Administration.



Dr. J. S. Duesenberry

The Dollar, Energy, Urban Problems and the Economy are Topics at Business Conference

Knowledgeable speakers on several of the major issues facing the country today were featured at the fifth annual Business Conference, held October 15 at the Horace H. Rackham Memorial Building in Detroit.

"The Position of the Dollar in the International Monetary System" was the topic of the dinner speech given by Dr. Robert V. Roosa, partner in the private banking firm of Brown Brothers Harriman and Company. From 1961-64, Dr. Roosa served as the Undersecretary of the Treasury for Monetary Affairs. He was introduced by Dr. Wilbur K. Pierpont, vice-president and chief financial officer of the University of Michigan.

The afternoon program preceding

the dinner began at four p.m. with a talk by Dr. Edward J. Mitchell, associate professor of business economics, on "The Energy Situation: Causes and Cures." Dr. Mitchell was formerly a senior staff economist on President Nixon's Council of Economic Advisers, and has served or is serving as an energy consultant to RAND Corporation, Ford Foundation Energy Policy Project, American Petroleum Institute and the Federal Power Commission.

"A Minority Perspective for the 1970s" was the topic of the next speech, which was given by Gustav Heningburg, president of the Greater Newark Urban Coalition. Mr. Heningburg is active in minority causes such as the United Negro College Fund and the NAACP. His current position in Newark, New Jersey, involves organizing, motivating and mobilizing resources of government, community and business representatives in coordinated efforts to solve major urban problems.

"The U.S. Economy in Transition" was discussed by Dr. Sidney L. Jones, Assistant Secretary of Commerce for Economic Affairs. Prior to his appointment by President Nixon this year, Dr. Jones served as minister-counselor for economic affairs to the North Atlantic Treaty Organization. He was formerly a professor of finance at the Michigan Business School.

Each of the afternoon talks was followed by a question and answer period. More than 600 people attended the conference, which was presided over by Dean Floyd A. Bond.

Public Finance Institute Is Established at School

Some months ago the Business School entered competition with a number of other major schools to persuade the Securities Industry Association to establish the Public Finance Institute here. Word has now been received that the Michigan Business School has been selected.

The first session of the Institute will be held in June, 1974, and fifty participants from across the industry are expected to attend. The Institute will be patterned heavily after the executive development programs. Faculty will be drawn from Michigan, from the industry and from other business schools. Administration of the Institute will be by the Division of Management Education, with a joint faculty-industry advisory committee.

In addition to fees, the industry has discussed the possibility of research funds as the project develops. The Association has expressed the hope and expectation that, growing out of this project, Michigan will become No. 1 in Public Finance in the country.

Paul McCracken Speaks On Need for Export Sophistication

Michigan businesses, like businesses throughout the United States, must get out of the "foreign trade kindergarten" and develop the export-marketing sophistication that foreign firms display in this country.

So said Paul W. McCracken, Edmund Ezra Day University Professor of Business Administration at The University of Michigan and former chairman of President Nixon's Council of Economic Advisers, in the keynote address at the International Trade Conference sponsored by the U-M's Industrial Development Division and the Michigan State Chamber of Commerce.

"For far too long U.S. businesses have taken the easy way out—contented with the large domestic market or simply buying businesses

abroad," McCracken declared. He added that such a policy worked when the dollar was overvalued, but now the dollar is undervalued and a new strategy is required.

"The blunt fact is that some U.S. firms are displaying the symptoms of old age," the U-M professor maintained. "All of us can think of significant new developments and products that are the result of foreign inventiveness and entrepreneuring—with their American counterparts a lap behind."

To regain industrial leadership, he said, U.S. businesses must tailor their programs, from product designs to marketing and distribution strategies, to suit foreign tastes and institutions.

McCracken emphasized that large opportunities for export markets are now available and cited several facts.

"World Gross National Product outside the United States in 1973 will exceed \$3,000 billion," he noted. "In short, the market for output outside the United States is double that inside this country."

Additionally, he pointed out that competitive conditions have changed in our favor with exchange rate adjustments in recent years. Since 1970, he said, Germany's wholesale price index for industrial goods, expressed in dollars, has risen 45 per cent compared with 13 per cent here. For Japan, the figure is 35 per cent and for the United Kingdom about 30 per cent.

Noting that "our competitors are having as much trouble with inflation as we are," McCracken said the climbing rate of inflation abroad also improves the U.S. position. He said that while our own rate of inflation during 1973 has been far too high, with the U.S. consumer price index rising at the rate of 8 per cent per year, the rate for Germany has been about 10 per cent, for the United Kingdom 12 per cent and for Japan 20 per cent.

"These trends are specially important for Michigan," he said. "Manufacturing outputs and employment will particularly benefit from these export opportunities, and Michigan people derive almost 40 per cent of their income from

manufacturing compared to less than 25 per cent for the United States generally."

In order to take advantage of these opportunities, the U-M professor said, the U.S. government must "cool off" the overheated domestic economy.

"We are not apt to make progress in cultivating foreign markets if we lose control of our price-cost level, or if the domestic economy is so overloaded with surplus demands at home that U.S. businesses have no incentive to seek out foreign orders," McCracken observed.

Accommodating to Changing Work Values is Topic of Associates Seminar

Various approaches and solutions to changing work values were presented to participants in a special seminar developed for companies who are Business School Associates. The seminar was held October 14 and 15 at the Campus Inn and the Assembly Hall.

Following a reception and dinner on Sunday, October 14, participants heard Stephen H. Fuller, vice president for personnel organization and development at General Motors, speak on "The Lordstown Syndrome."

The next day, Stanley E. Seashore, program director at the Institute for Social Research, spoke on "The 'Disaffected' Worker: A Diagnosis from Two National Surveys."

After lunch, Lee E. Danielson, professor of industrial relations discussed "Developing Managers to Implement Work Change." After this session, over which Dean Bond presided, participants in the seminar left by bus for Detroit to attend the 1973 annual business conference.

Associates seminars are informal, and give participants an opportunity to engage in discussion with experts in various fields—providing them with an exchange of views and information on the subject matter of the seminar.

Eight Faculty Newcomers Welcomed at Dinner

A dinner honoring new faculty members was held this fall at the Michigan League. New members of the faculty include:

W. James MacGinnitie, professor of actuarial science and director of the master of actuarial science program, is a fellow of the Society of Actuaries and a fellow board member of the Casualty Actuarial Society. From 1968 to 1972 he was Vice President for Corporate Development of the CNA Financial Corporation. Before coming to the Business School, he was consulting actuary for Milliman and Robertson, Inc. in Chicago.

Edward J. Mitchell, associate professor of business economics, received his Ph.D. from the University of Pennsylvania and has been a member of the Institute for Advanced Study in Princeton, N.J. and a senior staff economist for President Nixon's Council of Economic Advisers. He is a consultant to the Federal Power Commission and to the U.S. Department of the Treasury.

Donald H. Skadden, visiting Arthur Young Professor of Accounting, received his Ph.D. from the University of Illinois, and served as professor and associate dean at the University of Illinois College of Commerce and Business Administration. He served on the board of directors of the Illinois Society of CPAs from 1967-69 and is a trustee of the National Center for Automated Information Retrieval.

Wietze Eizenga, visiting Netherlands professor of business administration and economics, is a professor of economics and statistics at the University of Leyden, Holland, and Director of the Economic Institute. He has been a visiting scholar at the Survey Research Center at the University of Michigan and in 1969 visited the Michigan Business School on behalf of the Netherlands School of Economics.

C. Robert Carlson, assistant professor of finance, received his Ph.D. from Michigan State University in 1971. He also has a degree in electrical engineering, and was district plant manager for the Michigan Bell Telephone Company before starting work on his Ph.D.

Earl C. Keller, assistant professor of accounting, has his MBA and Ph.D. from the University of Washington and is a member of the American Institute of CPAs and the American Finance Association.

Patricia L. Braden, assistant professor of marketing for the winter term, has her MBA and DBA from Indiana University and is currently an assistant research scientist in the Division of Research at the Graduate School of Business.

Larry Michaelsen, lecturer in organizational behavior, is completing his Ph.D. at the University of Michigan. He has been assistant project director at the Institute for Social Research and a teaching fellow at the University of Michigan.

James Clarke, MBA '61 Nominated Assistant Secretary of the Interior for Management

James T. Clarke, MBA '61, has been nominated by President Nixon to become the Assistant Secretary for Management of the Department of the Interior.

Clarke is a certified public accountant and since 1961 has been associated with the firm of Coopers and Lybrand. He was in charge of the firm's Management Consulting Services Division in Detroit. In that capacity, he was responsible for coordinating the Company's services to government at the Federal, State and local levels in the midwest. During the past 12 years he specialized in numerous assignments involving financial analyses, organizational planning and budgeting, accounting, and EDP systems.

Clarke was confirmed by the Senate, and has taken office to head the

Interior Department's management and administrative activities which include management consulting, information services and data processing, personnel, manpower and youth programs, library services, financial audit, manpower planning, and program review.

D. O. Bowman Becomes Dean of Business School in Long Beach, Calif.

Dr. D. O. Bowman, former Director of the School's Division of Management Education, is the new Dean of the School of Business Administration of California State University in Long Beach, California.

Dr. Bowman, who holds a Ph.D. in economics from the University of Michigan, came to the Division of Management Education at the Business School from North American Rockwell Corporation, where he served as Vice-President, Management Systems and Planning, of the Autonetics Division in Anaheim, Calif. Before going to North American Rockwell in 1960, Bowman was Director of Long Range Planning at Crown Zellerbach Corporation in San Francisco from 1953-1960. He served as Assistant Administrator, National Production Authority, from 1950-53, and helped to develop economic policies at the Departments of State and Commerce from 1946-50. During World War II, as an army officer, he was an executive in the Office of Price Administration and in the Office of Strategic Services.

Bowman holds a B.S. and an M.S. degree in economics from Purdue University, and because of his distinguished career, has been invited by Purdue to take part in the Purdue "Old Masters" program held for four days each autumn on the Purdue campus. This program was developed to bring distinguished men and women from varied backgrounds and professions to the Purdue campus to discuss informally with students their philosophies of life and some of their professional experiences.

Prof. Carl Fischer Honored at Dinner

Prof. Carl H. Fischer, who was instrumental in building a distinguished program in actuarial science at The University of Michigan, was honored at a retirement dinner October 1st at New York's Waldorf Astoria Hotel.

More than 100 former students, colleagues and guests attended the dinner, which was held in conjunction with the annual meeting of the Society of Actuaries. Prof. Fischer was presented with an inscribed silver tray by the Michigan Actuarial Alumni.

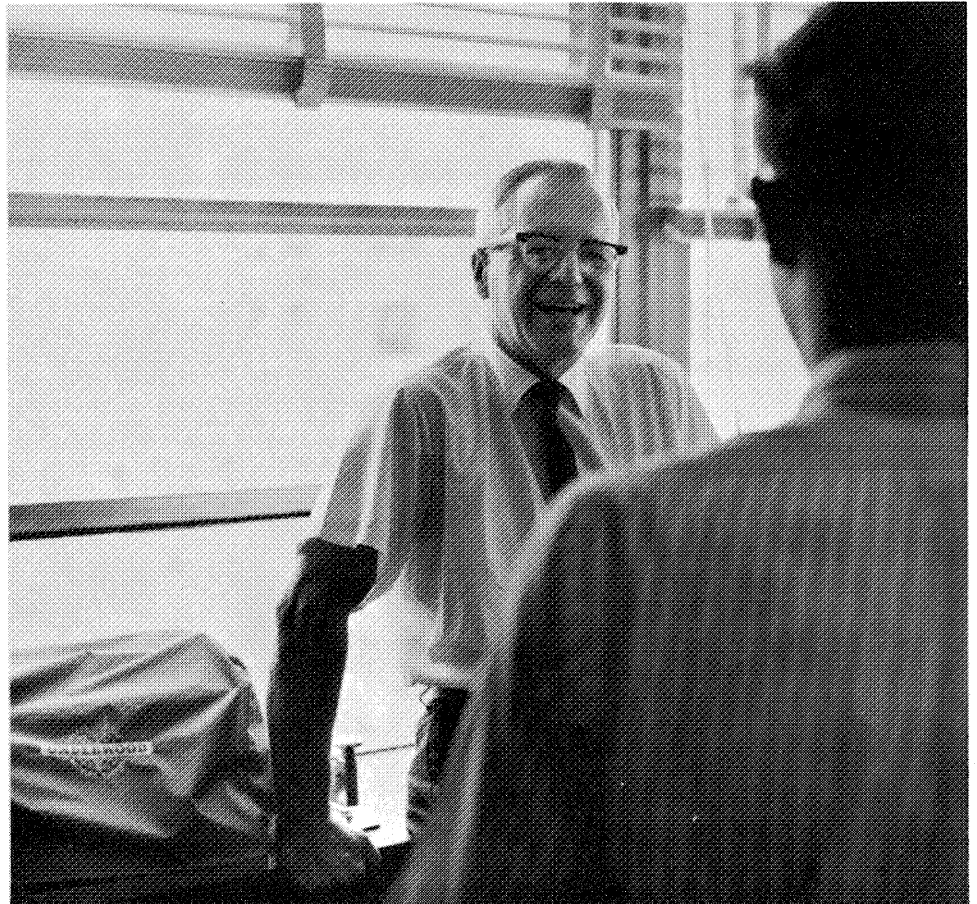
Currently on retirement furlough, Prof. Fischer joined the U-M faculty in 1941 as assistant professor of mathematics. He received the dual appointment of professor of actuarial mathematics and professor of insurance in the Graduate School of Business Administration in 1950.

A graduate of Washington University (St. Louis) and the University of Iowa, he taught at Beloit, Iowa, Minnesota and Wayne State University before coming to Michigan.

In 1956 he served as actuarial consultant to the Social Security Administration and to the Government Service Insurance System of the Republic of the Philippines under auspices of the U.S. International Cooperation Administration. He has also served as consulting actuary for the North Dakota Teachers Retirement Fund, Detroit Teachers Retirement Fund, Michigan Public School Employees Retirement Fund, Retirement Funds Study Commission of Indiana, and the Joint Legislative Committee on Retirement of Michigan.

Prof. Fischer also was a member of the Advisory Council on Social Security Financing which reported to Congress and chaired the U-M committee which studied the military retirement system for the U.S. Senate Committee on the Armed Forces.

His writings include two books, "Mathematics of Investment" (with Paul R. Rider) and "Mathematics of Life Insurance" (with Walter O. Menge).



Professor Fischer talks with a student in his office.

Third FORTRAN Studies Volume Published

Volume Three of *FORTRAN Applications in Business Administration*, edited by Laurence A. Madeo, lecturer in statistics and management science, and Thomas J. Schriber, professor of statistics, has been published by the Graduate School of Business Administration. The book consists of 17 case studies developed by the participants in the 1971 Business Faculty Summer Programs in Computing, funded by IBM and sponsored by the American Assembly of Collegiate Schools of Business. This is the last volume in a three volume series. The first two volumes contained FORTRAN applications developed in the 1969 and 1970 summer programs. Copies of Volume III are being distributed to the libraries of schools in the AACSB Assembly. Ulrich's Books, Inc., Ann Arbor, has copies of Vol. I (\$4.50), Vol. II (\$8.25) and Vol. III (\$4.50).

B School Graduate Receives Honorable Mention on National CPA Exam

Mrs. Vivian J. Lange, BBA '68 with distinction, has received honorable mention for her grades on the November, 1972 CPA examination.

The Honorable Mentions are part of the Elijah Watt Sells Awards, which were established by Council of the American Institute of Certified Public Accountants in 1923. From its founding until 1933 a cash prize was given to the candidate receiving the highest average grade. Since then, medals have been awarded for the two best papers combining all subjects, and certificates are given for the honorable mention papers. For the November, 1972 examination forty five honorable mention awards were given. For the November examination, 30,129 candidates wrote a total of 108,913 papers.

Mrs. Lange is employed by Gulf Reston, Inc., a subsidiary of Gulf Oil Corporation.

Speaker John S. Nolan, partner in the firm of Miller & Chevalier in Washington, D.C. and former assistant secretary of treasury for tax policy, goes over notes for his talk on the prospects for tax reform in Congress.

Nathan B. Hall,
associate tax counsel for
Ford Motor Company.

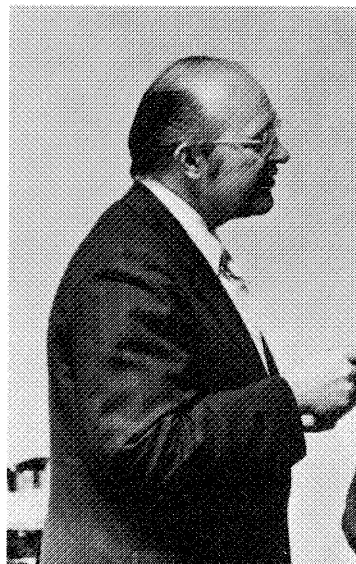


School Holds Seminar for Associates

Below, Dale Simons, 2nd vice-president and accounting officer, Manufacturer's National Bank of Detroit (left) and H. W. Weinreich, tax manager for Ex-Cell-O Corporation.



Above, Eugene A. Miller,
vice-president and controller,
Detroit Bank and Trust.
Right, A. H. Stack, manager of
the tax department, S.S. Kresge.



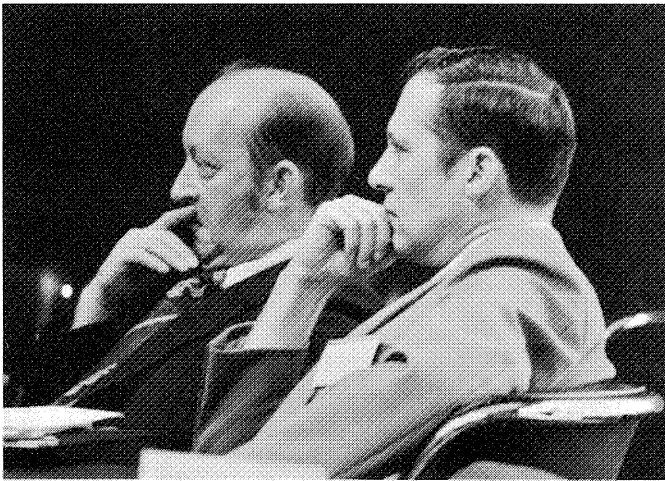
A special seminar on taxation, developed especially for the companies which are members of the Business School Associates, was recently held in the Assembly Hall. The seminar began with a reception and dinner, followed by a talk on the budgetary outlook and its implications for federal taxation. Representatives from Associate companies spent the next day hearing talks on financial disclosure of federal income taxes, the possibility of full taxation of capital gains, potential effects of European tax patterns on America, and prospects for and dimensions of tax reform in the Congress.

The Associates Program was launched by Dean Floyd A. Bond in 1971 to promote the mutual interests of the Business School and the business community; to develop friendships, understanding and closer working relations between faculty and executives, and to enrich the School's instruction and research and enhance its continuing management education programs.

The School holds special programs designed especially for members of the Associates Program. In addition, Associates receive all research reports and publications of the School, an annual roster of MBA degree candidates, an opportunity to interview prospective graduates, and notice of timely meetings and seminars on subjects of interest to them.

Photos by Duke Campbell

T. C. Campbell, corporate tax supervisor for Consumers Power Company (left) and Alan R. Lincoln, manager of corporate taxes, the Upjohn Company.



Charles R. Garber, senior staff tax attorney, Standard Oil Company of California.



Above, Harvey E. Brazer, professor of economics and consultant to the Federal Reserve Board, who was one of the speakers, and (right) Donald J. Prush, supervisor of the tax department of the Bendix Corporation.



Joseph B. Bourke, assistant vice-president, First National City Bank of New York.

J. C. Pugh, director of taxes for Libby-Owens-Ford, discusses a point with a colleague during a break.

Above left, Leonard M. Savoie, vice-president and controller, Clark Equipment Company, and (right) John B. Cook, assistant treasurer for taxes, General Motors Corporation.

Faculty News

Claude R. Martin, Jr., associate professor of marketing, is a member of an interdisciplinary team at the University which has received a National Science Foundation grant to study telecommunications policy. The main objective of the project is to develop a theoretical overview for policy decisions related to the experimentation with and the provision of new services via cable communication. He will participate in the development of a policy-oriented taxonomy for categorizing and assessing suggested new services, both public and private.

James R. Taylor, associate professor of marketing, has published an article in the *Journal of Marketing Research*, May, 1973, entitled "The Effect of Ecological Concern on Brand Perceptions." The paper was co-authored by Thomas C. Kinnear.

Christopher M. Korth, assistant professor of international business, spent a month in Paris under a grant from the Agency for International Development. He was studying French investments in Africa, and will continue the study next spring in Africa.

Meyer S. Ryder, professor of industrial relations, spent several weeks in Israel last spring as a member of an inter-cultural relations American academic team composed of economists and industrial relations specialists.

Raymond R. Reilly, assistant professor of finance, is co-author of an article, "On the Weighted Average Cost of Capital," published in the January issue of the *Journal of Financial and Quantitative Analysis*.

Thomas G. Gies, professor of finance, served as chairman of President Fleming's Ad Hoc Committee on Communications Review. Last winter the committee issued a report identifying and evaluating the opportunities to create and employ new instructional technology at the University of Michigan—the use of computers, television and the entire complement of audio and visual systems.

Raymond E. Hill, assistant professor of industrial relations and *Edwin L. Miller*, professor of industrial relations, presented a paper entitled "Underlying Selection Criteria for Middle Management Positions: A Factor Analytic Study," at the meetings of the National Academy of Management in Boston on August 21.

Paul W. McCracken, Edmund Ezra Day University Professor of Business Administration, received an honorary LLD from Berea College, Kentucky. It was at Berea, he notes, that he began his teaching career, teaching English. In May, Prof. McCracken traveled in Germany, Belgium and England for the State Department, and in June he took part in a tripartite meeting of economists on foreign trade policy in Tokyo.

Douglas A. Hayes, professor of finance, has a chapter entitled "Ethical Standards in Financial Reporting: A Critical Review," published in the book *Corporate Financial Reporting: Ethical and Other Problems*, edited by John Burton and published by the American Institute of CPAs, New York, 1973.

Mary Bromage, professor of written communication, conducted programs this summer on functional communication for the Department of Commerce, HUB, HEW, IRS, Kansas State Auditors, Ford Motor Company, Coopers and Lybrand, Kellogg Company and the U.S. Army Audit Agency. She is also the author of "The Management of Communications" published in the S.A.M. Advanced Management Journal.

David J. Brophy, associate professor of finance, has just finished a study to be published by the Institute of Science and Technology entitled, "Financing Technological Entrepreneurship." He is currently working on a textbook on money and capital markets.

James E. Wheeler, associate professor of accounting, has developed the text on consolidated tax returns for the American Institute of CPAs' professional development division. He is also the author of an article entitled "The Investment Credit in

Regulated Companies," published in *The Tax Adviser*.

George D. Cameron III, lecturer in business law, did research this summer on the Soviet legal profession in four cities in the USSR (Moscow, Leningrad, Kharkov, Sochi) under the auspices of the Citizens Exchange Corps. He is co-author of an article entitled "Accounting Changes: Why CPAs Must Conform" published in the February, 1973 issue of *Management Accounting*.

Karl G. Pearson, professor of business administration and director of real estate education, is the author of a 466 page textbook, published by Grid, Inc. of Columbus, Ohio and entitled *Real Estate: Principles and Practices*. Since its publication in the winter of 1973, it has been adopted as a textbook by 37 colleges and universities and 13 real estate institutes. Professor Pearson is also the author of an article entitled "What's Ahead for Housing Now?" published in the July, 1973 *Michigan Business Review* and of "Real Estate Syndications," published in the June, 1973 issue of *Real Estate Today*.

Sidney Jones Appointed Assistant Secretary of Commerce

Dr. Sidney Jones, former professor of finance at the U-M Business School, has been nominated by President Nixon to be Assistant Secretary of Commerce for Economic Affairs.

Dr. Jones joined the business school faculty in 1965, and left the business school in 1972 to become Minister Counselor for Economic Affairs in the U.S. Mission to the North Atlantic Treaty Organization in Brussels. Since April, 1973 he has been a director of Bradley Woods and Company, an investment advisory firm in New York, N.Y. and Washington, D.C.

From August 1969 to August 1971, Jones was with the Council of Economic Advisers, serving as a Senior Staff Economist until March 1970, when he became Special Assistant to the Chairman.

The Role of Energy in the Nation's Economy

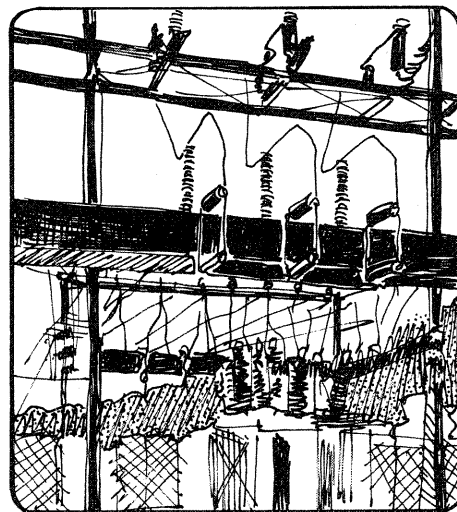
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state). Development of added supplies has been discouraged. And now we find ourselves entering into agreements to pay foreign producers far more than we have permitted at home. Gas-short industrial states such as Michigan have a particularly important stake in these higher prices because our own further economic development would be jeopardized by a shortage of this fuel.

We also need an increase in the price of gasoline and distillates, and it should be a large one—large enough to dampen demand now. The belief that our present problems are caused by big companies conspiring to reduce supplies and thereby extract higher prices is of a piece with the view that most problems are caused by demons and spirits. This atavistic relapse into Mephistophelean diagnoses simply reflects an all too evident tendency in this era to refuse to face facts. We have elaborate government machinery and a large bureaucracy and they must, of course, be on the alert to see that collusive activity does not exist. The elementary facts about the energy problem are, however, there for all to see if we will look. Demand has been rising rapidly worldwide, and in 1972 refining capacity in this country increased only 1.2 percent.¹ By contrast the increase in Western Europe was 8.7 percent, and for Japan the figure was 15.1 percent. No refineries—no gas. It is as simple as that. Now we are in a box because it takes time to bring new refineries on stream. And it is hoped that government, whose own actions contributed heavily to this problem, can show enough maturity to avoid a McCarthy-esque vendetta against the energy industries.

What we need now is scheduled increases in the tax on gasoline. The increases should be large enough to be highly visible—for example,

perhaps 10 cents per gallon immediately and another 10 cents later. And a proportionately large increase would be needed on distillates. Since a large increase in these taxes would produce a large increase in revenues, offsetting reductions in other taxes should also be made. (These taxes are not the way to manage fiscal policy.) The precise figures are, of course, less important than the principle here. The principle is that the increases in these taxes should be large enough so that the customer is conscious of them each time he heads for the station to fill his tank and to the auto dealer when he is shopping for a new car. And he should be conscious of it when he sets his thermostat for the day's temperature. This is why a purely nominal tax would not do. It would not be large enough to remain above the threshold of continuing consumer awareness. Estimates of how much such a tax would cut consumption are based on wobbly evidence, but something like a 5 percent reduction fairly quickly and somewhat more later would be a reasonable guess. (Since their volumes would be affected and their customer relations problems greatly aggravated, dealers



should probably have an additional penny or two per gallon also.)

Third, we should require that all new stationary users of fuel, largely electric generating plants, be designed to burn coal or be nuclear unless the reasons for an oil-burning facility are in the crisis category. It obviously makes little sense to be throwing large additional demands into oil-short markets when these facilities can be operated with other fuels. They should be required to reflect the best technology for minimizing pollution (air, water, thermal) consistent with their being nuclear or coal-burning.

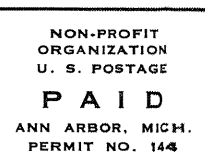
Fourth, obviously the trans-Alaska pipeline should be cleared, with work getting underway promptly. Technology has brought risks of laying such a pipeline in the Arctic down to reasonable levels, and it would add close to 20 percent to our domestic production. This would also improve our bargaining position in the international oil market. The proposed alternative of a Canadian route would cost vastly more, delay for years the availability of this oil, further increase our dependence on Middle East oil, lengthen the distance of the pipeline in permafrost, and pose difficult questions in our relationships with Canada.

Fifth, we must strive to ameliorate, even if moderately, the problem of our dependence on the Middle East for imported oil. A more even-handed foreign policy in the Middle East would probably make sense in any case, but in an era where a substantial share of our oil needs will be coming from that region, it hardly seems rational to encourage the use of this issue for political purposes. We must also, of course, take measures to reduce our dependence on Middle East oil and thereby do what we can to improve our own bargaining position—such as the Alaska pipeline, better use of abundant coal supplies, and using gasoline more sparingly.

Finally, we need a better balance between our concerns about environment, concerns that in themselves are meritorious, and our

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¹"BP Statistical Review of the World Oil Industry, 1972," p. 12.



The Presidents Club

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eventful weekend for members of the Presidents Club. Following the meeting they had lunch at the Michigan League, and heard *China in Perspective: Three Views from the Great Wall*, a panel discussion moderated by Allen S. Whiting, professor of political science. Participating in the panel were Alexander Eckstein, professor of economics; Albert Feuerwerker, professor of history and a director of the Center for Chinese

Studies, and Rhoads Murphey, professor of geography and a director of the Center for Chinese Studies. After lunch various tours were available for those who wanted to participate. Following dinner in the ballroom of the Michigan League, members heard a talk by President Robben W. Fleming.

The next day (Saturday, Sept. 22) another panel was presented entitled *Everything You Always Wanted to Know About the Economy—but Have Been Afraid to Ask*. Participants included Gardner Ackley Henry Carter Adams, University Professor

of Political Economy and former Chairman of the President's Council of Economic Advisers; and Paul W. McCracken, Edmund Ezra Day University Professor of Business Administration and former Chairman, President's Council of Economic Advisers. Dean William Haber, adviser to the executive officers and former chairman of the department of economics, presided over the discussion.

After a buffet luncheon in Crisler Arena, members attended the Stanford-Michigan Football game.

It was a highly successful weekend!

The Role of Energy in the Nation's Economy

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concerns about energy. There is a trade-off here. Our energy problem would be eased if we could forget about our environmental concerns. We do not, however, want to forget about them because they are important. The problem is to get a reasonable balance in the inevitable trade-off. At what point does further improvement in our environmental rules cost so much in terms of what must be given up in other directions that it is not worthwhile? That question must be faced explicitly. Having 100 percent of the pollutants out of effluent from factories, or a 0.0 percent rise in temperature of water surrounding a nuclear plant's outlet, or a 90 percent further reduction of auto emissions from a base already down 70 percent—on general economic principles one would suspect that this would be overdoing it, requiring resources that could better be used elsewhere.

A part of the problem is that we

do not set up the structures in government so that moving on one objective is subject to the discipline *within the same agency* of being responsible for what must be given up in another direction. Only if an agency is responsible for both ends of the trade-off can we expect rational decisions. If EPA is responsible for environmental matters only, its own optimum is to be ultra-conservative that it is not criticized for lax environmental standards. The high costs of these standards in other directions are not its responsibility. If the AEC is responsible for safety of nuclear plants, but not also for an adequate nuclear generating capacity at reasonable cost, the Agency's optimum will tend to be standards that are redundant; the Commission would be criticized for a plant that fails, but the problems of plants delayed and generating capacity in short supply are not its responsibility.

If we are to have more rational national policies, the government agencies must be organized so that responsibility for both ends of trade-offs is in one decision-making unit. This suggests that we should move in one of two directions. The EPA, for example, could be enlarged, giving it responsibility also for our national energy policy. Or each agency with energy responsibilities could also be held responsible for adequate attention to environmental concerns in its decisions.

If each agency has responsibility for only one end of the trade-off, the costs of its inevitably ultra-conservative decisions get insufficient attention until the ordinary citizen finds that his air conditioner browns out on a hot day, or the filling station has no gasoline, or he loses work because the factory cannot obtain gas. Then the danger is that a back-lash may swing sentiment too far in the opposite direction.