IT is indeed a great pleasure to have the opportunity to appear before you to discuss the aspects of "The Role of Futures Markets in Determining Flow of Commodities in Domestic and International Trade."

Before giving you my analysis of how this role is fulfilled, I would like to present to you some thoughts I have concerning the economic necessity of futures markets and then show you how these futures markets determine flow.

In my view, and it is certainly not an original thought, the most serious problem of second half Twentieth Century civilization is the tremendous disparity of wealth between the rich and the poor nations of the world. The problem is primarily economic, but leads to all sorts of different political and philosophical considerations which all of us are attempting, by a major effort, to solve.

The facts are that the total rate of inflow capital formation funds, whether used by industry or agriculture, into the underdeveloped or economically emerging nation is not greater than $20,000,000,000 a year. Approximately $4,000,000,000 of this $20,000,000,000 is realized by aid from rich countries. (It might be parenthetically noted that the $20,000,000,000 is
less than 20% of what the rich nations spend on armaments per annum). This $20,000,000,000 is not sufficient to allow the poor countries to assume a posture of self support with a voluntary saving economy. The result is that more and more underdeveloped countries are coming under governmental planning controls so that forced savings are effected which establish governmental patterns (especially Africa and Asia) which we, in North America, find increasingly incompatible with our own political views.

Here, a dilemma becomes apparent. If we, for example, in the U. S. A., the U. K. and indeed the Western world, continue to make grants to underdeveloped nations, we create payment deficits which later manifest themselves in the Sterling crisis and, more recently, the Dollar crisis, which has been pointed up by the tremendous 1964 overflow of gold. On the other hand, if we do not continue or, indeed, increase our grants, we potentially surrender vast areas of the world which supply raw materials to those who are economically and politically opposed to our viewpoint.

As you know, the President of the United States has called together the heads of two hundred major corporations and banks urging that the banks do not increase their dollar loans to foreign countries by more than 5% over last year. This is difficult because many have already exceeded this figure. Secondly he has asked that Corporations cut down their dollar investment abroad for new funds to 80 or 85% of last year's commitments. This program is voluntary, and has been somewhat successful for you will note that the interest rate for three months loan of Euro-Dollars is up one half point in the last thirty days.

All of this points up how serious the problem is, especially since many countries are using this crisis caused by our voluntary action to convert dollars into gold for their own
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ends. This is especially true in France and Spain. Herr Ab, a leading independent German banker has been endeavoring to get Chancellor Erhard to do the same, but thus far, Erhard has wisely resisted.

It would appear to many that we can very easily, if we wish, embarrass many European countries by cutting back on our foreign grants, cutting down on our tourism by taxing American visitors abroad and by sharply cutting back our military aid. There are many in the Congress who wish to take a stronger view and seriously resent us putting billions of dollars into France and then having them try to strengthen the Franc at the expense of the Dollar. It has been humorously said that some think de Gaulle believes that his end of the lifeboat won't sink if the ship of stability goes down.

Simultaneously, however, the world as we know it, is aligning itself along new political formations. We used to think of the division of nations along the North/South axis. On one hand, the Free World was Australia, Japan, the Western hemisphere, Southeast Asia, New Zealand, the U.K., the Common Market countries and the Outer Seven. On the other hand was Russia, China, Northeast Asia and the COMECON countries. Somewhere in the middle of the two Worlds rest Africa and India.

However, today we find a definite shift to a horizontal axis because countries, however politically opposed, are finding themselves increasingly economically interdependent and are joining together. We find that China is seeking Africa and Japan as its partners by trade agreements and Southeast Asia by military action. Without doubt, the reluctant enigma India, is being courted by Peking. More and more, Russia and the COMECON countries are becoming aligned politically with the Western World.

In my view, as the horizontal axis becomes increasingly ap-
parent, free trade within our new sphere will increase. Supply and demand must have a larger voice in determining price, for price will ultimately control the movement of raw and finished output.

Therefore, anything which cuts down on governmental interference within our sphere, anything which makes it easier to stop increasing government controls, is to be encouraged. Price of supply and price of demand is what ultimately determines flow of raw and finished output. Generally speaking, as price declines, demand increases.

Another facet to this same problem is an immediate economic one. Russia, under Marx, thought that underconsumption in home markets led to economic and later, political imperialism. Here too, we are seeking a definite shift in thought. We now see vast areas of the world suffering from underconsumption. The lack of inflow capital formation funds produces an environment which does not give that surplus of output leading to foreign exchange, so necessary to later bring in industrialization. Indeed, only small parts of the world, primarily the U. S. A. and Canada, are producing agricultural commodities beyond their needs. Yet, there is not the foreign exchange in areas of underconsumption to buy this output.

Twenty percent of the world receives seventy percent of the world's income. For example, we in the United States have a favorable balance of trade, but an unfavorable balance of payments brought largely upon us because of our military expenditures to safeguard our political way of life, and our Foreign Aid Program for economic and political reasons. We may be the first nation in the world to voluntarily debase its own currency. This is because of our conviction it will be possible to convert the slower developing nations, by our gifts of output which they cannot afford since they lack foreign ex-
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change, into a compatible philosophical and political view with ours.

It would appear to me that the vast monies we devote to foreign aid are only a drop in the proverbial bucket. This theory is yet to be proven.

The question arises as to whether or not futures markets, as we know them, help determine and assist the flow of domestic and international trade and, to that degree, help solve this immense world economic problem. I have stated, and I am very sure that if we make progress in solving this problem, it will be by increased international trade. Since the Fourth Crusade, wars have been fought for economic objectives. If futures markets lead to increased international trade because they also allow increased domestic trade within any given country, then futures markets have truly a moral and economic justification. This is the reason for their being.

Let us start from the beginning. Futures markets make possible with little vertical price risk, the expansion of the world's output in many commodities by allowing domestic output to increase to a point beyond domestic consumption. This leads, because of lessened risk, to the inflow of capital into economically emerging countries which creates foreign exchange necessary for the industrialization after an agricultural revolution. As these poorer countries are able to stabilize the sale of their raw materials, they create a climate desirable for investment. Futures markets, because of their structure, lead to an expansion of trade within a given country and control the direction of movement of raw material as it seeks to be consumed domestically or internationally by the highest bidder.

A futures market has two sides — I will touch on the first one without detail. This is the Speculative side. This side assumes outright vertical price risk. There could not be a
commercial side to use a futures market to lessen its risk without a speculative side to assume that risk. For our purposes today, it is really not terribly important whether the speculative side makes or loses capital funds at any given moment. What is important is that there is a speculative side pressing to buy when the commercial facet seeks to sell, or to sell when the commercial facet seeks to buy.

Since Dante enumerated in his Inferno the various vices of man, it has become apparent that greed and avarice must be controlled and, therefore, speculation must be policed so that it does not become excessive and uneconomic. However, the futures market is such a delicate marketing mechanism that this policing should only be at a minimum to encourage a climate conducive to economic speculation. The speculative side, I reiterate, is interested in vertical price movement and risk.

It is the other side of the futures market about which we are concerned: the commercial side. This segment uses a futures market to establish a relationship between its ownership of a cash or spot commodity and the price of that commodity at a definite time in the future. The commercial side of the market is interested in this horizontal price relationship between cash and futures. At times, the commercial side may act as a speculator and later, use the futures market to liquidate its vertical price risk and establish the horizontal relationship.

How do futures markets influence flow of commodities?

There are many types and kinds of futures or forward markets, some are extensively organized with great formality. The Chicago Board of Trade is such an example. Others are a loose association of commercial interests. I will, by four examples, attempt to show you how various futures markets increase the flow of domestic trade. This leads to a surplus
output, putting the country in an export position which then leads to the inflow of capital funds from earned foreign exchange.

1 — At the present time in the United Kingdom because of an imbalance of trade and an imbalance of payments, there has been a real threat to the value of Sterling. There are those who believe that if Sterling is devalued, the United Kingdom would become more competitive in world markets and reduce its imbalance of payments. But, what of the American farmer who sells to the U. K. via trade channels? He would like to sell corn to the United Kingdom and so expand his own output. However, the exporter has a real problem — he buys from the farmer in dollars, but he is going to get paid in Sterling at a later date. The exporter knows the present relationship of Dollars to Sterling, but not the future relationship. As a matter of fact, he may not even be able to purchase his corn today for a shipment, let us say, to be made next May.

Here is how a futures market and a forward money market allow this trade. The exporter buys 375,000 bushels of corn on the May futures contract in Chicago. Later, when he buys the actual or cash corn, he will sell out his futures. Obviously, he only took the contract when the price of the futures showed a profit in relation to his sale price. As he signs his contract with the U. K. buyer, he immediately books his forward freight by going to the cheapest seller (another informal futures market). However, at this point, since he must pay for corn in Dollars and he is going to get paid Sterling at a later date when he actually ships the corn, he must protect the relationship between Dollars and Sterling and so he, (in Zurich, Tangier or other money markets) sells Sterling short, equivalent to what he is going to get and buys forward Dollars for the same delivery.
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Later, he will sell out his Dollars and buy in his short Sterling position. He has frozen, if you will, the relationship between Sterling and Dollars. Here is a fairly good example, I think, of two informal and one rather formal futures market being used to increase the output of American corn. Because of the vertical price stability they give commercial interests from farmer to exporter, they encourage productive output to a surplus which then goes into international channels.

2 — The Dominican Republic's principal source of foreign exchange results from its sale of its exportable surplus of sugar. Sugar prices fluctuate rapidly. The crop is harvested normally twice a year. To expand the economy in the Dominican Republic and to earn foreign exchange by having exportable surplus requires that the sugar grown be sold at a profit. Many times, the private sellers, who sell under governmental export license when they find the price satisfactory, will sell in New York or London forward sugar contracts to the extent of $\frac{1}{2}$ to $\frac{3}{4}$ of their anticipated production. Their futures sales, in essence, give them the right to deliver in the future (as they harvest these crops) at a given price. This leads obviously, when prices are satisfactory, to increased domestic output. It certainly leads to lower costs because of stability of sugar prices within the Dominican Republic and, indeed, may lead to an internal expanding economy. At a later time when a crop is harvested, the forward futures position is repurchased. Here is another example of where a formal forward New York or London market has helped determine the flow of commodities.

3 — The soybean processor in Finland wishes his plant to run continuously. Although he can buy his soybeans from China or the U. S. and, let us say, has the elevator capacity to store the three months inventory he can buy, he does not
wish to take the risk of a downward price movement. Therefore, as he buys his cash soybeans, he sells Chicago Board of Trade futures. Later, as he can sell his oil and meal production from these beans, he buys back his soybean futures.

To the extent that he can produce soybean meal in Finland and sell it to feedmakers, a futures market has definitely contributed to the flow of output in that country far beyond what it would have been had the Finnish soybean crusher (if there had been no futures market present) been required to buy inventory and take the vertical price risk. A futures market allows the Finn to pay more for his soybeans and sell his products for less since he is not taking a vertical price risk, but rather a horizontal risk between the price of his soybeans and the American futures market. Again this certainly allows domestic output to be increased which creates a surplus output leading to foreign trade and ultimately, to foreign exchange.

4 — Many commodities are seasonal in harvest and, as you know, from your previous discussions on basis and inventory and control, many commercial elements naturally like to acquire maximum cash inventories at the cheapest possible "basis" relationship. These cheap "basis" levels have a tendency to be present when the harvest is under the maximum selling pressure by the producer. This requires an enormous amount of capital to finance these inventories. Needless to say, that because of a futures market, the acquirer of inventory is able to borrow from commercial banks at a far lower rate of interest than he would pay if he maintained an unhedged or outright long ownership position of the commodity without a futures market hedge.

Therefore, futures markets allow and encourage the expansion of a given economy at far cheaper money rates than would be present if there were no futures market. This applies for
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a soybean crusher in the U. S. — a metal producer in the Ruhr — or a coffee exporter in Ghana.

I am, personally, very sure that as countries become increasingly interdependent, the presence of formal and informal futures markets create a climate of less governmental control of countries and the build up of an expanding economy within that country causing surplus output. This, then leads to international trade and its reward known as "foreign exchange".

The domestic price of any free commodity or of any commodity selling above its government support level is based on its export value.

Because futures markets by their mechanisms lead to lessening vertical price risk and because we therein get increased domestic output, they do definitely determine the flow of output. This will lead to a lessening of the great disparity in wealth between richer and poorer nations. They will cause increased foreign exchange for poorer nations as they expand their economy and ultimately, lead to a standard of industrialization which will be far beyond what can possibly be realized by economic grants from countries such as the United States, Russia or the U. K.

Industrial revolutions must be preceded by agricultural revolutions. The futures market structure, to this degree, determines the increases in the rapidity of flow of this output and, to that extent, helps solve this basic problem of our time.

By coincidence, the London Economist recently had a small article which you might be interested in, and I would like to quote it:

"In March, 1957, when Ghana became independent, this was the richest-looking west African country of them all. Since then, Government revenue has only slightly more than doubled, when government expenditure has nearly quad-
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rupled. The price of cocoa, on which Ghana's economy still mainly depends, is now down to about a quarter of its Korean boom-time values; this is partly due to Ghana's reluctance to accept an international cocoa agreement in 1963.

"But the point is that the republic's present economic problems are primarily due to the fall in the cocoa price; they are only secondarily due to the frightening-off of private investors, the inefficiency of Ghana's state-owned corporation (£40 million invested in them have produce a loss of nearly £14 billion to date), and grandiose social and private spending by the government. If cocoa had a better price, Ghana could afford its present politics; with the price down, it cannot."

Now, I would like to say that if Ghana had used more extensively — and they do use to a degree — the futures market, it wouldn't have changed the price of cocoa, but it would have protected Ghana, and instead of being concerned with the horizontal relationship between cash cocoa and a futures price in London, they assumed, if you will, the role of a speculator. They are now paying that price. There is not only use of the futures market, but there is also misuse of the futures market.

I am very sure that futures markets have an important economic function. That function is just simply to allow an organization, in some form, whether informal or formal, to allow economic stability between cash and futures.

In emerging nations, this leads to surplus output, then foreign trade, which brings foreign exchange, and fosters an expanding economy by the inflow of capital funds and, if you will, an agricultural revolution, more efficient methods, and, later, industrial revolution.

There is an economic justification for these markets, and I do believe that for possibly these reasons that the Board of Trade and other Exchanges have a bright future.

Thank you very much.
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THE ROLE OF FUTURES MARKETS IN DETERMINING THE FLOW OF COMMODITIES IN DOMESTIC AND INTERNATIONAL TRADE

DISCUSSION

CHAIRMAN GAUMNITZ: Thank you very much, Mr. Raclin.

Now, as usual, we will take some questions. Who wants to start?

GOLDBERG: What is the relationship between international commodity agreements and futures market?

RACLIN: International commodity agreements depend, of course, normally on a surplus condition. You have them because you do have surplus, and you have the marketing problem. To that degree, as you get pricing at a fixed level with minimum exports by this agreement, futures markets, I think, have less economic justification.

NORTH: Is there sufficient liquidity in the international commodities like cocoa for the state trading cartel or monopolies to use this futures market if they wish?

RACLIN: Yes. Let me give you an example. Everybody always talks about their success. I will tell you one where I really fell on my face. The government of Spain has been in a position for a number of years of having a shortage of vegetable oils substitutable for olive oil. Olive oil at a high price is good to sell because you get foreign exchange back, and then, you can buy something to replace it. Their method of buying, which was by public auction in enormous quantities of a hundred thousand tons at a time, had the tendency to cause large price fluctuations in our oil prices because suppliers here who would offer them the lowest would get the business, and then, that supplier would have to lift his short oil hedge and cause a run-up.
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After the first one or two of these auctions were held, it became obvious when the Spanish were going to buy. Some exporters began prehedging and by lifting their hedges, the price would go up, and the Spanish would then have to pay more. I went over to Spain to talk to the government people and try to convince them that although they still had the same requirements, the way they ought to buy was to buy half or all of their requirements quietly on the futures market, and then, ask for a public auction on "basis", and then, sell those futures to the low supplier. By doing this, the Spanish would have the ability to pick the price and they could do it quietly.

The thing fell apart for two reasons. Reason one was they felt and, possibly, properly so, that they couldn't put their buying in the hands of one firm. Politically, this would be undesirable.

They also had a little trouble with a man named DeAngelis some time previous to that, and they didn't want to be in a position like that again.

The reason I cite this as an example is: I believe that the futures markets are of sufficient size that crops may be fully hedged. By selling a futures market, the producer takes the price off of the commodity, and now has only the risk of the relationship between the cash he owns and the futures price which is a horizontal relationship. He no longer has vertical price risk.

Now, the horizontal relationship is a big risk too. Don't underestimate it.

A futures market is only successful if both sides, if you will, have an equal opportunity. The long is normally the speculator, and he must feel that he has the same advantages economically as the short does. If he doesn't, he is not interested. He gets tired of losing money after a while, or should.

At any rate, I have often thought the long ought to have a
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little more advantage than the short because he doesn’t have a merchandising profit to lose, an export profit to lose, a basis profit to lose. If there is a situation where the long and the short, the commercial versus the speculator, have equal opportunity, then, you have big free liquid markets, and they are sufficiently large to hedge crops.

FRIZOL: Why should puts and calls in the futures market be illegal?

RACLIN: Some time ago — and I am really not qualified to comment — there was the so-called Crawford market where puts and calls were used here, and the position got so enormous it allowed a volume of trade far beyond the economic importance, and failed because there was a misuse of the market by attempted corners.

FRIZOL: Well, if used properly would there be any advantage?

RACLIN: This would require a change in the law of the land, as you know.

FRIZOL: Yes, I realize that.

RACLIN: I don’t think there would be any advantage. I personally think that our present market is large enough without puts and calls, which only really allow increased volume of trading with less margins than we have today.

What I am saying is that a put and call market expands the velocity or volume of trade. To offset this, higher margins would be called because you want to discourage uneconomic use. I would say over-all, sir, that the present markets are large enough.

KNOKE: I wonder if you would develop the concept that industrial revolution must be preceded by the agricultural revolution. There is some evidence to suggest in this day and age that the industrial revolution may be preceding the agricultural revolution in some countries.
RACLIN: You mean in the emerging nations?
KNOKE: Yes.

RACLIN: Well, I have felt that by pure coincidence, the area of emergence happens to be the areas of surplus of raw material, and as you have these people become free politically, they are expanding their domestic consumption, and are becoming — temporarily, I hope — more inefficient, rather than efficient in their own agricultural production as they have taken over from previous leadership. They have not merchandised their commodities which should earn them the maximum foreign exchange. This is why these nations have required foreign aid.

However, I really don’t think that you can industrialize a country, any country, unless you can really feed that country or have the guarantee that somebody else will feed them.

But, we have a problem. How can we continue enormous foreign aid and have our gold leave us? The only area I can conceive of which will stop the gold outflow is by cutting foreign aid. I don’t think that the other areas can be successful. As a matter of fact, the voluntary request to cut back foreign loans has fallen apart to a degree.

It is awfully hard to cut back on that six and one half billion dollars we are spending every year for tourism.

If you tax a tourist a hundred dollars to go to Europe, he will, if he is going to spend two thousand, probably spend two thousand one hundred.

Each emerging nation seems to want an air line before they eat. This is prestige, but a lot of people get hungry.

I may be too cynical on it.

KNOKE: I just wonder whether or not this is developing, however.

RACLIN: Yes sir, I think so. I see great evidence of the development of cutback in the whole African complex. I am
not that familiar with the Philippines and Southeast Asia.

HANSEN: I would like your comments on the impact of tariffs on futures markets.

RACLIN: In relation to the Common Market?

HANSEN: Yes, we have imposed some too, have we not?

RACLIN: Yes, even against Australia.

Well, there is no doubt that when you have a tariff structure — I say this categorically — as you do in the Common Market, that there is not the same necessity for the use of the futures market by the seller as there would be if there were not the same tariff structure.

I think that tariff structures such as we do have in the Common Market definitely hurt the use of the futures market because the futures markets do not perform an economic service. The futures markets are not a great big glorified gambling area as some of the speculative element would like us to believe, but they have an economic function. When they don't, and this is what is happening, I think without any question in the whole Common Market area there is not a need for futures markets. You have high import prices, high threshold prices, and target prices set so high no matter how cheaply we may produce, we cannot compete. The offsetting compensation of the levies or the skimmings, as they call them, just becomes a higher figure.

HANSEN: What is your forecast as to what will happen in the foreseeable future in the tariff levels there?

RACLIN: There will be exceptions, of course, but I think it is generally felt that American agricultural surplus will have an increasingly difficult time to compete in this area. Our imports will be substituted with the production of high cost, rather inefficient, domestically grown commodities in the Common Market area.

They cannot grow soybeans. I am not too worried about
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They can, however, grow wheat. They can grow corn, barley, oats, flax, rapeseed, sunflower, and we will not be able to compete with that. We can't. We will start retaliating.

ARTHUR: I take it, Bob, that the sugar contracts reflect primarily the difference in tariff structure between the two markets quoted. Are there other cases like this where you have a futures market difference reflecting the shelters themselves?

RACLIN: Yes, you have it in the wool market. You have a wool market in Australia, London, New York, all of them reflect this. You have a discrepancy in price based on the tariff differentials. Sometimes, supply and demand causes a situation to exceed domestic price. You then get market fluctuations which allow an arbitrage. In the little town of Bradford, England, which is a wool center up in Yorkshire, there is an arbitrage exchange to take advantage of their three futures markets which reflect the exact situation I pointed out.

Thank you very much.