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CAPITAL SHORTAGE IN RURAL ALASKA

CONCEPTUAL ISSUES

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-Draft-

I. Introduction and Recommendations

The main questions addressed in our study were:

1. Have imperfections in private capital markets caused a capital shortage in rural Alaska?

2. Have governmental policies caused a capital shortage in rural Alaska?

Our answers are:

To 1, yes. There is above average concentration in the banking industry in Alaska, which appears to have led to above average spreads between banks' deposit and lending notes of interest, and to less lending than would be found in a competitive market. However, this appears to be a state-wide problem, rather than one facing just rural Alaska.

To 2, yes. The State of Alaska has a number of policies which contribute to capital shortages. There are (a) state usury and loan interest ceilings, (b) the gross receipts tax on banks, (c) reserve requirements for state chartered banks, and (d) the many state loan programs.

These answers lead us to a third question:

3. What can be done to improve the functioning of Alaska's capital markets, and what role should the state budget surplus and the Permanent Fund play in the improvement process?

Our answer is that the state has the power to do a great deal to improve Alaska's capital markets. We suggest the state consider:

(a) abolishing all interest rate ceilings;

(b) abolishing the gross receipts tax;

(c) abolishing the 20% reserve requirement for state banks;

(d) passing a new Small Loan Act;

(e) abolishing all state loan programs.

We believe these actions would bring capital market efficiency in Alaska at least up to the national average, and perhaps beyond. We thus see no economic reason for the state to be involved in the loan business, and no need to view the

state budget surplus and the Permanent Fund earnings as pools of loanable funds. We thus suggest:

(f) that the budget surplus, for the most part, be distributed to Alaskans;

(g) that the Permanent Fund be managed to maximize the yield of its portfolio.

We further suggest that:

(h) the state subsidize people, not capital if the true concern is income and wealth distribution in rural Alaska;

(i) the state subsidize houses, not mortgages if the real issue is a socially unacceptable standard of housing in rural Alaska;

(j) the state Business Loan Program be evaluated;

(k) if the Alaska Housing Finance Corporation stays in existence it be required to promote innovative lending by buying price level adjusted and graduated payment mortgages;

(l) the state substitute a consumption tax for the income tax, effectively reducing the Federal income tax burden on Alaskans.

II. Conceptual Issues in the Capital Shortage Problem

We will now turn to an explanation of our conclusions and recommendations. First, I will discuss conceptual issues. Next, Dr. Fry will report on our empirical study of Alaska's capital markets. The conceptual issues are as follows.

Some basic terms must be defined. First, there is a distinction between real capital and financial capital. Second, capital can be considered as either a stock or a flow. A major distinction is between positive (market, economic) shortages or capital, which are defined in terms of the workings of free, efficient markets, and normative (social) shortages of capital, which are defined with reference to individual and group norms and values.

We will begin with the concept of a well functioning market. This is a market of many borrowers and lenders, none of whom have any power over terms and conditions of

loans. Equilibrium of supply and demand in this market will determine the interest rate and the amount of capital loaned and borrowed. This result will be economically efficient.

A positive (market, economic) shortage of capital is defined as an amount of capital less than would be found in a well functioning market. There are many potential causes of such capital shortages. These include:

1. temporary shortages due to changes in market supply and demand. In a free market the interest rate will soon adjust to eliminate such shortages.

2. permanent shortages due to interest rate ceilings. Interest rate ceilings make it illegal for interest rates to rise to eliminate shortages and thus can perpetuate shortages.

3. shortages due to monopoly power. A monopolist will find it in his interest to restrict lending and raise interest rates.

4. shortages due to the nature of infrastructure capital. Private capital markets will generally produce too little infrastructure capital because private investors cannot capture the wide spread public benefits produced.

5. shortages due to government created risk and uncertainty. Too little capital may be produced as private investors react to uncertainty about future taxes, regulations, and restrictions.

6. shortages due to taxes and regulation. Taxes and regulation which raise the costs of lending will tend to reduce the amount of lending and capital formation.

7. shortages due to lack of market mechanisms to deal with risk. If firms cannot insure against various types of risk, they will reduce the amount of investment undertaken.

This concludes our list of varieties of positive shortages. We now turn to the concept of normative shortage. The normative (or social) shortage is generally defined in terms of perceived "needs". If less capital than "needed" is produced by the market, then a shortage is perceived by those who have defined the needs. The needs concept is criticized by economists because (a) it is subjective, and the perception of needs varies from person to person, (b) it

ignores overall resource constraints, and (c) it ignores costs.

There are many potential sources of perceived normative shortages. These include:

1. shortages due to differences in borrower characteristics. Capital markets will discriminate among borrowers on the basis of amount of collateral and equity, evidence of business ability, and credit history. Those discriminated against may perceive a shortage of capital.

2. shortages due to transactions and information cost differences among borrowers. Capital markets will discriminate against borrowers presenting high information and transaction costs. Those discriminated against may perceive capital shortages.

3. shortages of capital confused with shortages of income. People who are poor lack capital among many other things. However, their basic lack is one of income and wealth, and giving them more capital is only one way to increase their income and wealth.

4. a shortage of capital confused with a shortage of work. Those who stand to benefit from large scale construction projects - workers, suppliers, transporters - often see a lack of such projects, and characterize this as a capital shortage. However, there is no economic shortage here unless there are available benefits which would generate net benefits.

5. a capital shortage confused with a shortage of subsidies. Government loan programs which offer subsidized interest rates or loose credit tests will face many eager demanders. But there will always be too few subsidies to meet this demand. Further, as government terms and conditions become seen as the norm, people will start to believe there is a shortage of private capital on reasonable terms.

This concludes our listing of varieties of normative shortages.

III. General Policy Considerations

Our specific policy suggestions have already been listed, and will be discussed in more detail in Dr. Fry's presentation. However, here at the end of this discussion on conceptual issues some general comments on policy are in order.

First, when positive capital shortages are found "the cure should fit the disease". That is, if a capital shortage has a specific cause then that cause should be attached directly. Unfortunately, though, government has a tendency to discover a problem, then pick a solution which expands the size of government and its role in the economy, whether or not that is the best solution. If capital shortages in Alaska are due to government policies, then the best solution is to alter those policies, not to get the government more deeply into the lending business.

Second, many attempts have been made by governments around the world to stimulate economic development by subsidizing capital in particular, and private enterprise in general. Unfortunately, many of their policies have had the unintended result of destroying profit-seeking, market oriented firms, and of creating in their place subsidy-maximizing firms. The subsidy-seeking firms will produce anything, anyway, anywhere, so long as it gains them a subsidy. When the subsidies end, these firms fade away, and it is discovered that no viable economic base has been created, despite all the resources used up and all the activity undertaken.

PLEASE NOTE: THE FOLLOWING PAGES WERE TREATED AS A UNIT IN THE ORIGINAL DOCUMENT.

March 1980

INVESTMENT CAPITAL IN RURAL ALASKA

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SUMMARY

1. Findings

(a) <u>There is no evidence of any economic shortage of physical capital in rural Alaska</u>.

Were there an economic shortage of physical capital in rural Alaska, then unexploited investment opportunities which would yield above-market returns must exist. The current perception of residents of rural Alaska and outside observers is that profitable investment opportunities are lacking in rural Alaska. We have found no evidence to contradict this view.

The best indication that unexploited profitable investment opportunities are not abundant in rural Alaska comes from the performance of the ANCSA (Alaska Native Claims Settlement Act) regional and village corporations. The conclusion must be reached that the 12 regional corporations and 205 village corporations have failed to locate unexploited profitable investment opportunities in rural Alaska. Corroborative evidence is also provided by the Small Business Administration's (SBA) activities in rural Alaska.

Rural Alaska has not witnessed rapid economic growth precisely because of the lack of profitable investment opportunities. Apart from the census division of Barrow, above-average population growth during the 1970s has occurred only

in Alaska's urban and contiguous rural areas, i.e. Haines, Matanuska-Susitna, Seward and Valdez-Chit-Whittier.

(b) Rural Alaskans may not be able to borrow as much as urban Alaskans because they have less wealth.

White families in the United States possess three to four times more net wealth than minority families at any given level of income. If urban and rural Alaskans hold the same proportion of their wealth in the form of deposits, the deposit holding differences will reflect differences in wealth.

Excluding public bank deposits, deposits of all kinds (bank, S & L and credit union) averaged $5,910 per urban Alaskan and $2,082 per rural Alaskan in 1977. However, this difference needs to be interpreted with considerable caution. For one thing, there is a substantial volume of banking by mail. The United Bank of Alaska claims that 65 per cent of its accounts are mail accounts. Furthermore, many Alaskans are known to bank out-of-state, particularly in Seattle.

Nevertheless, this three-to-one difference is consistent with the hypothesis that urban Alaskans may well possess three times the wealth of rural Alaskans at similar levels of income. The further implication about differential borrowing abilities is clear. Rural Alaskans may be able to borrow only one third as much as urban Alaskans, since ability to borrow is limited by the borrower's own equity in the prospective project.

(c) There is no evidence that financial institutions discriminate against rural Alaskans.

One can certainly live further from a bank in rural Alaska than would be possible anywhere else in the United States. Nevertheless, population per bank branch is not substantially higher in rural than it is in urban Alaska. Furthermore, the population per bank branch in rural Alaska of 3,609 is considerably lower than it is for the United States as a whole - 5,062. Even in states permitting statewide branching, as does Alaska, there are 4,868 persons per bank branch. Total per capita deposits in rural Alaska are only 37 per cent of the value of per capita deposits in urban Alaska. Deposits per rural branch are 47 per cent of deposits per urban branch. On these bases, Alaska has an above-average supply of bank branches even in its rural areas.

Economies of scale exist in the banking industry. Hence, unit costs of banking should be higher for rural than for urban branches of Alaska's financial institutions, since rural branches are much smaller than urban branches. These higher unit costs might be met in four ways: (a) Lower deposit rates of interest and higher service charges; (b) Higher loan rates of interest; (c) Fewer banking services; (d) Lower profits.

Deposit rates of interest, even on large certificates of deposit, and service charges are uniform across all bank branches in Alaska. Loan rates are not differentiated on a regional basis, nor are the credit standards applied to loan applicants.

Rural branches offer fewer services than urban branches. However, the branch banking system enables all clients to obtain specialised help and consideration - impersonally and with some delay - from head office. This solution is evidently viewed as a poor substitute for personal contact and local decision making autonomy.

It seems that rural branches are indeed less profitable than urban branches. This conclusion was corroborated by bankers interviewed during this study. For example, it was claimed that the National Bank of Alaska could never build its existing branch network if it had to start from scratch again today.

It was alleged by various interviewees that bank branches simply sucked deposits out of rural Alaska to Anchorage. Loan distribution data are unavailable. However, the Community Reinvestment Act of 1977 obliges regulated financial institutions to service the credit needs of the communities in which they are chartered to do business. Federal financial supervisory agencies are required to enforce this law. Responses from the Comptroller of the Currency, the Federal Deposit Insurance Corporation and the Federal Home Loan Bank Board indicated that all regulated financial institutions in Alaska had complied with the Act.

In conclusion, we could find no evidence that private sector financial institutions in Alaska discriminated against residents of rural areas.

(d) <u>Government creates capital shortage in rural Alaska through subsidised credit</u>.

There is a plethora of subsidised loan programmes in Alaska. The interest rate is deliberately set at a rate below the market equilibrium. Demand therefore exceeds supply and there is unsatisfied demand. Those who are not satisfied may rationally prefer to wait in the hope of a subsidy in the future rather than borrow now at market rates of interest. Subsidised credit programmes create their own economic capital shortage - there is always a shortage of gifts.

To the extent that greater subsidies have been given to rural borrowers, there is a greater capital shortage in rural than in urban Alaska. Capital shortage created in this way can be eliminated completely simply by abolishing the subsidised credit programmes. The only other way it to meet all loan demands at the subsidised rate. This necessarily involves eliminating all private supply of capital in Alaska.

(e) <u>Government lending replaces private lending in rural Alaska</u>.

Unsubsidised state lending supplants an equal volume of private lending. In this case, the interest rate on state loans is the same as the rate on private sector loans. Therefore, total demand for loans will be unaffected by the introduction of a state loan programme. If a borrower chooses the state programme, the state must in turn borrow the funds with which to

supply the loan. The increased demand for funds by the state is offset exactly by the decreased demand by the private sector financial intermediaries. Hence, aggregate demand remains unchanged here too. With no change in direct and derived demand for funds, the quantity supplied, i.e. aggregate saving, will be unaffected too. If the pool of saving remains unchanged, an increase in state lending to finance investment must be exactly offset by a decrease in private lending to finance investment, since saving equals investment.

This crowding in by state lending programmes will not be complete if state lending is subsidised. In this case, there will be an overall increase in saving and investment. The tax exemption of interest on bonds sold to finance state lending programmes is a subsidy illustrating this point. For example, the AHFC can sell tax exempt bonds and lend on these funds in the form of mortgages at below market rates of interest. As a result, the aggregate quantity of loans demanded increases. To be sure, this raises the market rate of interest so that the tax exemption is financed in part by all other borrowers. The main point here, however, is that the higher market rate of interest elicits an increase in the quantity supplied, i.e. in saving. Hence, both saving and investment rise.

It is not just economic theorising which provides these results. As part of this study, borrowers from the State Business Loan Program were surveyed. Of those borrowers who had approached a private sector institution before obtaining a

loan from the State's programme, only one was actually denied a loan elsewhere. Seventy-eight per cent of these borrowers simply preferred the lower interest rate charged by the State.

The rapid expansion of public sector lending in Alaska has thwarted growth of the private sector financial institutions. Since there are economies of scale in financial intermediation, state lending has kept the private financial institutions' unit operating costs higher than they otherwise would have been.

(f) Regulation causes capital shortage in rural Alaska.

Reserve requirements for state chartered banks, the franchise tax, interest rate ceilings, selective credit policies, and the Small Loan Act hold financial intermediation in both urban and rural Alaska below its optimal level, inhibits innovative lending which is essential in today's inflationary climate, and produces an economic shortage of financial capital, particularly of the high interest, high risk variety.

Below equilibrium institutional interest rates hold financial intermediation between savers and investors below its optimal level. Higher real institutional interest rates increase incentives to save and to invest, and also raise the average efficiency of investment. This is so because financial intermediaries raise real returns to savers and, at the same time, lower real costs to investors by accommodating liquidity preference, reducing risk through diversification, reaping economies of scale in lending, increasing operational efficiency and

lowering information costs to both savers and investors through specialisation and division of labour. When real institutional interest rates rise, disintermediation falls and financial intermediaries can use their expertise to allocate more efficiently the larger volume of investible funds which is then forthcoming.

2. Recommendations

(a) Subsidise people not commodities if the true concern is income and wealth distribution in rural Alaska (p.19).

(b) Subsidise houses not mortgages if the real issue is a socially unacceptable standard of housing in rural Alaska (pp.17-19, 29).

(c) Repeal the usury law, Small Loan Act, franchise tax and reserve requirements. Allow finance companies to accept deposits (pp.60-74).

(d) Abolish state lending programmes and selective credit policies (pp.63-70).

(e) If the Alaska Housing Finance Corporation stays in existence, require it to promote innovative lending by buying

price level adjusted and graduated payment mortgages (p.88).

(f) Evaluate the State Business Loan Program (p.90).

(g) Relieve Alaskans of federal tax on their saving, thereby effectively substituting a consumption tax for the present income tax. Should the state wish to encourage savings to stay in Alaska, the deduction and tax credit for federal tax on saving could, at some loss of welfare, be restricted to saving kept in Alaska (p.94).

(h) Distribute the state budget surplus to Alaskans (pp.96-97).

(i) Set the Permanent Fund management the sole objective of maximising the yield of the Fund's portfolio (p.99).

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CAPITAL SHORTAGE IN RURAL ALASKA:

CONCEPTUAL ISSUES

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1. What is capital?

The term capital is commonly used to refer to at least two different concepts. Both are relevant for discussion of capital shortages. Real capital or economic capital refers to real factors of production, produced as a result of past investment, which have potential for continued productivity into the future. Concrete examples are tools, machines, buildings, roads, air strips, inventories, etc. It is not the physical nature of these things which makes them capital, but rather that (a) they are man-made and (b) they have expected future productivity. Raw land, for example, is physical, but is not capital by this definition, but any value of land over and above raw land value, which has been produced by draining, clearing, leveling, and so forth, is a capital value. Buildings and machines, although produced by human effort and investment, are not part of the capital stock, by the above definition, if they are located where they have no foreseeable economic use, or if they have been made obsolete by technology. Capital need not be physical. Human capital is an important part of the real capital stock. It is that part of human productive ability which itself has been produced by investments in health, education, and training.

This last point should serve to remind us that not all capital is owned by business firms or government--households also own capital. Equally importantly, households use capital in direct production of goods and services for their own use--housing, meals, auto repair, child care and so forth. Thus from an economist's point of view residential housing, chain saws, automobiles, kitchen stoves, and other consumer durables are all part of the real capital stock. This line of reasoning is particularly relevant for rural Alaska where much production is under-

taken by households, rather than by business firms, and is for direct use, rather than for the marketplace.

Financial capital, on the other hand, refers to financial instruments which represent either title to or claim to real capital and other useful resources. Standard examples are stocks, bonds, commercial bank business loans, trade credit, term loans, mortgages, and so forth.

The question of a capital shortage clearly involves propositions about both real and financial capital. Those who argue there is a capital shortage generally believe there is too little real capital in the industry or area of concern. They believe it would be both productive and profitable to have more real capital available to work with other factors of production. But while increasing the amount of real capital is in some sense the ultimate concern of those who believe in capital shortages (and sometimes the only concern, as when a shortage of infrastructure capital is seen as the problem), the immediate concern is usually with financial capital--with increasing the flow of both credit and equity investment which will allow firms to grow, develop, and acquire more real capital. Thus analysis of capital shortage problems usually comes down to questions of how well and efficiently various financial markets work in meeting the demands of business.

2. Capital: Stock vs. Flow

Real capital refers to man-made productive resources, produced as a result of an investment process. Since investment has been undertaken in the past a stock of capital currently exists. Thus a capital shortage may be defined in terms of the current stock of capital being smaller than the desired stock. As will become clear in the discussion to follow, the meaning and interpretation of the term "desired" is of some importance, particularly since desired capital is defined by some in terms of market demand, and by others in reference to normatively defined "needs".

Capital can also be defined as a flow concept, having a time dimension, as, for example, in speaking of the amount of real or financial capital per year flowing into a certain industry or area. A capital shortage in these terms would refer to too little capital growth in an area over some specified period of time.

Obviously the two concepts are related. People who believe there is a capital shortage often think (a) the capital stock in the area or industry in question is too small and (b) the flow of new capital to correct the situation is also too small. It is equally clear, though, that other combinations of views on stocks and flows are possible. For example, one might believe the capital stock to be too small, but be satisfied at the rate at which capital was flowing in to correct the stock shortage. Or, alternatively, one might believe the stock too small, yet simultaneously believe capital was flowing in too fast to be absorbed efficiently. A person holding this last set of beliefs would believe in a capital shortage in the stock sense and a capital surplus in the flow sense.

This discussion should alert us to the important reality that the capital shortage issue usually involves two somewhat separable questions, which are seldom well separated in public discussion: (1) what is the optimum stock of real capital for an area at a given time, and (2) what is the optimal time path of adjusting the actual capital stock to achieve the desired or optimum stock.

3. What is a capital shortage?

The question of what a capital shortage is, is more complex than it might seem. Capital shortages are many things to many people. To some people there is a capital shortage in an area if that area simply has less capital than some other area. This definition has little to recommend it. Shortage implies too little, and less is not necessarily too little. There is, for example, less capital in the middle of the Sahara desert than in industrial Detroit, but that fact could not sensibly be taken as evidence of a capital shortage in the Sahara.

Obviously, the concept of capital shortage should be rooted in some notion of the productivity of capital in alternative uses and places. It might, for example, be said there is too little capital in one place, and too much in another, if a net increase in output would result from transferring capital out of the second place and into the first. Likewise, it might be said there is too little new capital being created, and too much consumption being undertaken, if a diversion of resources from consumption to investment would improve social welfare, somehow defined and measured.

Unfortunately, though, when differences between area or regions are less striking than the differences between the Sahara and Detroit it is very common to find people declaring the existence of a capital shortage on the basis of a physical count of units of capital. More sophisticated approaches count capital per capita, or per dollar of income, or sales. But none of these definitions of capital shortage have firm analytical underpinnings, and none really come to grips with the question of what constitutes too little capital.

However, more useful definitions of capital shortage exist. In what follows several definitions will be presented and developed. The

central concept of shortage to be presented here is the economist's notion of a "positive" shortage. The term positive is derived from the school of philosophy known as logical positivism, and refers to concepts which have empirical referents and can be analyzed using the scientific method. Ideally, positive concepts are value-free, and thus the existence or non-existence of a positive shortage could be agreed upon by qualified observers of differing political or ideological beliefs. The positive shortage concept to be presented here is also often referred to as a market shortage.

The other major category of shortage to be examined here is the normative shortage. Normative shortages are defined with reference to the norms and values of an individual observer, and thus may be a matter of dispute between people with differing values. The term normative refers more to questions of what should be (value questions), than to questions of what is (scientific questions). Obviously, normative definitions of capital shortage abound, and must be addressed in any policy oriented treatment of the subject.

4. The concept of positive or market shortage

The market shortage concept will be defined here as a flow concept (that is, having a time dimension) and as it relates to financial investment capital. Simply put, a market shortage exists if the amount of investment capital available over some specified time period (a year, a decade, etc.) is less than the amount which would be forthcoming in a free competitive market.

As a preliminary to discussing the concept of a market shortage it will be helpful to develop the theory of a competitive market. Assume a free, competitive market for investment capital. The demand for capital comes from many individuals and firms wishing to acquire funds in order to make real investment expenditures. We assume so many demanders of funds that no single demander has any power over the interest rate charged; all must accept the market interest rate as given. Figure 1 shows a downward sloping demand curve for investment funds, meaning that more funds will be demanded as interest rates fall, everything else held constant.

The supply of capital comes from many sources, and is an increasing function of the interest rate, as shown by the upward sloping supply curve in Figure 1. Among the sources of investment funds are the investing persons and firms themselves, financing investment out of personal savings and retained earnings; other individuals willing to lend funds; and various financial institutions, such as commercial banks, savings and loan banks, venture capital firms, credit unions, and so forth. We assume the supply side of the market to be as competitive as the demand side, with no supplier of funds large enough to have any market power; instead, all must take market interest rates as given.

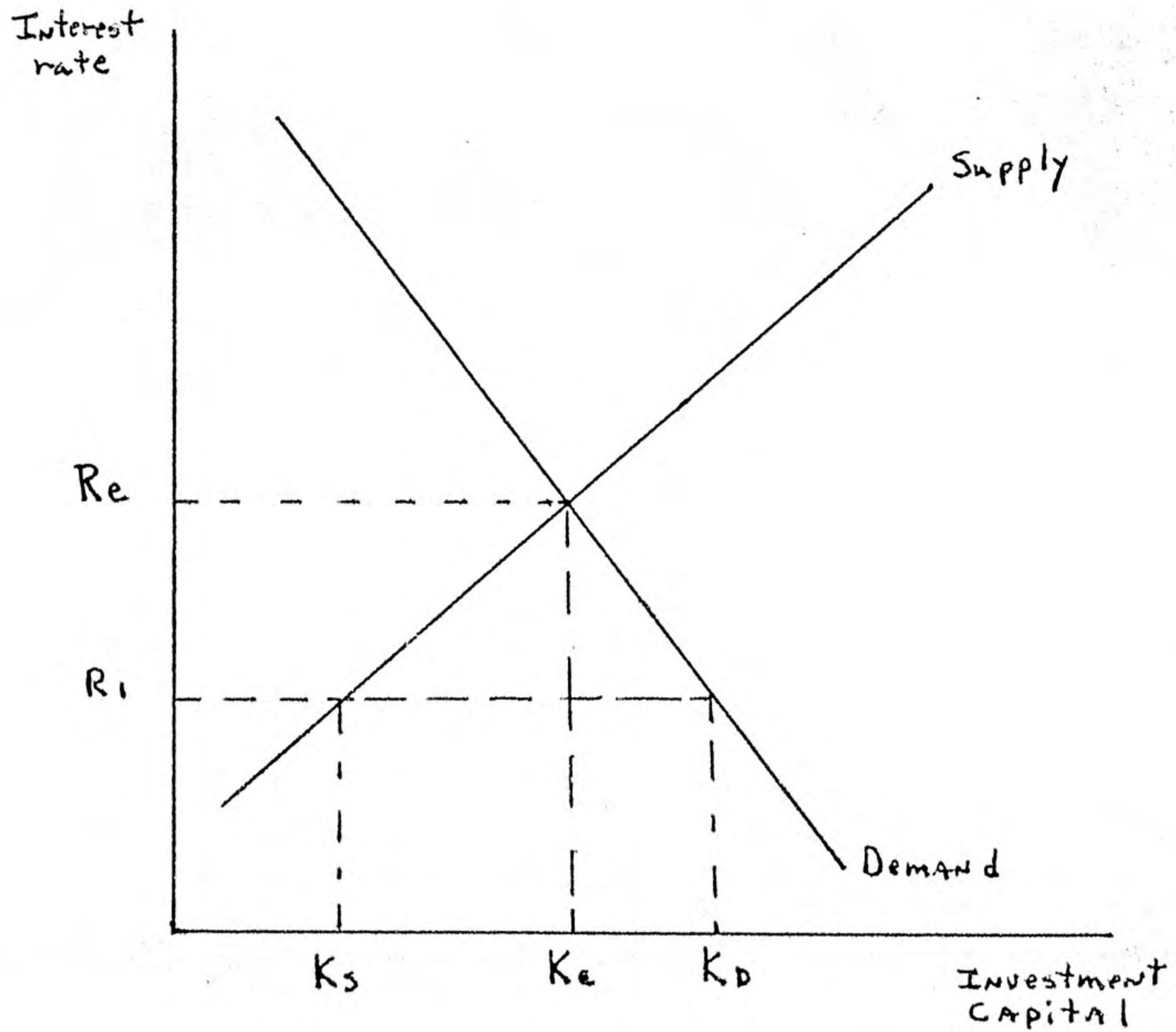

Figure 1

Equilibrium in the marketplace is established where supply and demand intersect. At the interest rate R_e the amount lenders are willing to lend equals the amount borrowers are willing to borrow. That amount is shown as K_e in Figure 1. In the situation just described the market clears. There is neither capital shortage nor capital surplus. The concept of positive or market shortage can now be defined with reference to the workings of a competitive market. A positive shortage is said to exist if the amount of capital actually available in the marketplace is any amount less than K_e, the equilibrium amount in a competitive market.

The efficiency significance of market equilibrium. Market equilibrium has now been described, and market shortage defined. In a moment causes of market shortages will be identified and discussed. First, though, it is important to understand why market equilibrium is generally considered economically efficient, and thus, conversely, why market shortages are considered economically wasteful and inefficient.

The market demand curve for investment funds is a schedule showing amounts of investment funds which will be demanded at various interest rates. More importantly for our purposes, though, the height up to the demand curve above any point on the quantity scale shows the maximum interest rate the most eager borrower is willing to pay for an incremental unit of capital. This willingness to pay is directly determined by the expected productivity of the would-be-investor's investment project. That is, someone expecting to reap a 20% return from a project would pay no more than 20% to acquire funding.

The market supply curve is, from one perspective, a schedule of amounts of investment funds which will be offered at various interest

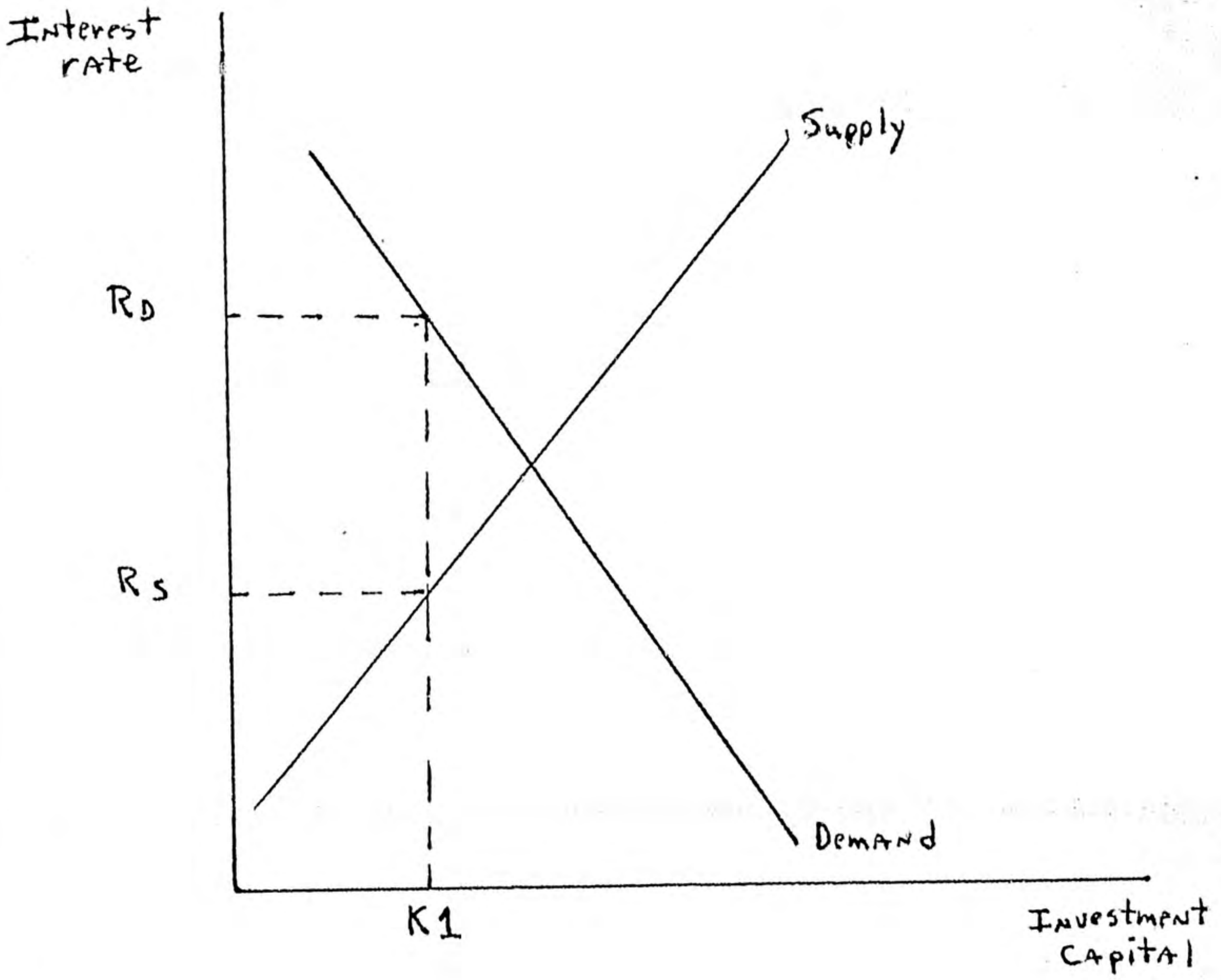

Figure 2

rates. However, for our purposes it is more useful to read the supply curve vertically. The height up to the supply curve above any point on the quantity axis can be interpreted as showing the minimum interest rate the most eager lender would have to receive to make him willing to offer an additional increment of investment funds.

Now, with the above as background, consider three market situations as shown in the following graphs. In the first case (Figure 2), the supply of capital to the market has stopped just short of the amount K_1. What are the consequences of suppling the next unit, K_1? It costs some lender the amount R_s to supply that unit. That is, some lender would have to be paid R_s to part with that unit, and presumably the amount he must be paid reflects the value he places on that unit because he has other uses for it (personal consumption, investment in his own firm, investment in markets in other areas, countries, etc.). However, if the unit is supplied to the highest bidder in this market it will go to someone who will invest it in a project yielding R_d return. Thus, if the unit is supplied it is transferred from a use yielding R_s to a use yielding R_d, for a social gain of $R_d - R_s$.

This gain would all be given to the lender if interest rate R_d was charged. If R_s was charged all gain would go to the borrower, and the gain would be split up various ways if various rates between R_s and R_d were charged. But no matter how the gain is split up the important thing is that potential for such a gain exists when supply has stopped anywhere to the left of equilibrium. Economic efficiency in the capital market, then, has to do with realizing such gains by seeing to it that investment resources flow from suppliers to demanders so long as R_d is greater than or equal to R_s. A free competitive capital market produces

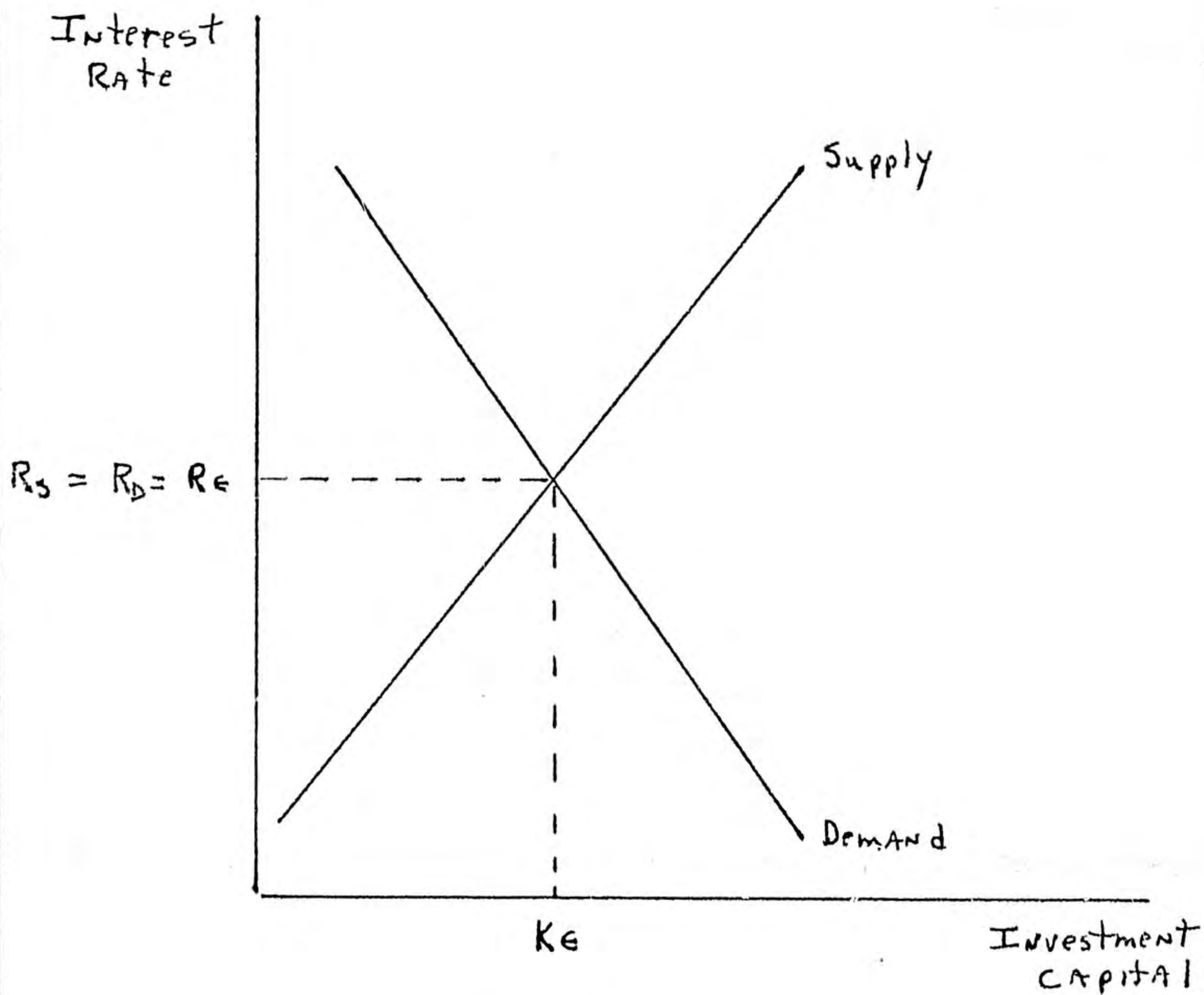

Figure 3

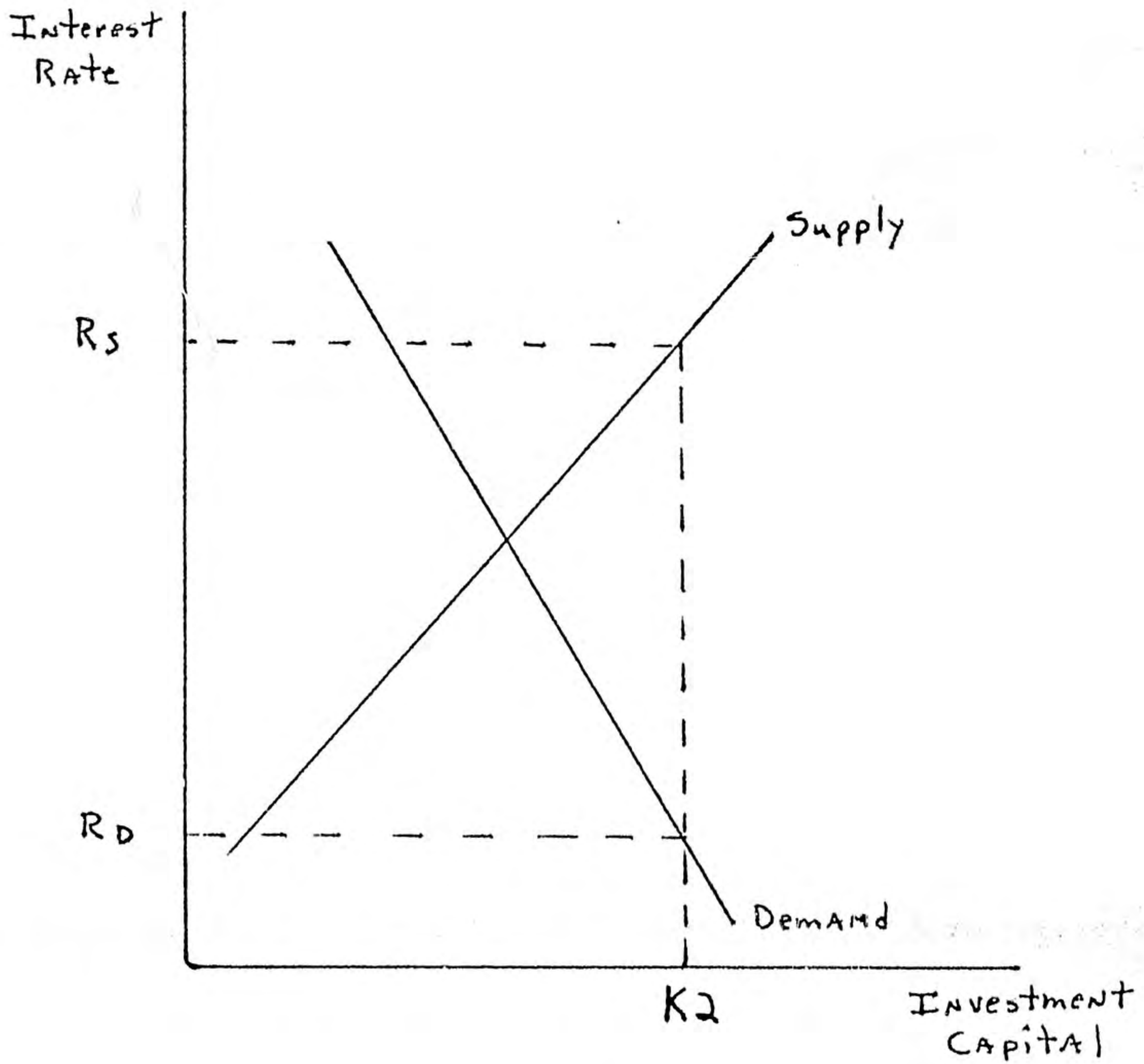

Figure 4

an efficient allocation of capital because it sees to it that the supply of capital does not stop at a point like K_1, but instead is taken up to the equilibrium amount, K_e.

Now consider Figure 3. Here investment has been taken up to the K_e unit. At this point the interest rate some borrower is willing to pay, R_d, is just equal to that some lender must receive (R_s) to supply the unit K_e. It makes no social difference whether this unit of capital is left in the hands of the lender or passed along to the borrower; the rates of return are the same in both uses.

Finally, consider Figure 4, which shows investment having been taken right up to the point where K_2 is the next unit of investment to be considered. If the K_2 unit is transferred from lender to borrower it leaves a use where it returns R_s and moves to a use where it returns the lower amount, R_d, for a social loss of $R_d - R_s$. It would be economically inefficient to make such a transfer, because it would lower the rate of return gotten from investment resources. The free competitive market will see to it that such transfers are not made, because it will settle at K_e, rather than moving up to points like K_2.

It should be clear from the above analysis that (1) market equilibrium has normative importance because it represents taking investment up to the point where no more social gains can be made through investment, and (2) that capital shortages (stopping the supply of capital anywhere to the left of K_e) are economically wasteful because they leave some social gains from investment unrealized, and (3) that excess investment (taking investment beyond K_e) is also wasteful, because it involves cases where funds are taken from higher valued uses and transferred to lower valued uses.

This last point should serve to warn us that public policies aimed at eliminating capital shortages should be precisely targeted, for if they overshoot they may be as wasteful or more wasteful of scarce resources as the condition they are meant to correct.

Capital shortages with their resulting waste of resources can be caused by a number of factors and conditions. We will now examine and analyze the most important of these.

Causes of market shortages. Number one: temporary shortage due to changes in market conditions. Assume the market is in equilibrium where S and D_o intersect at R_e, K_e as shown in Figure 5. Now assume the demand for investment funds shifts out to D_1. At the old interest rate, R_e, the quantity of funds supplied will remain at K_e, while the amount demanded will increase to K_d. This causes a gap between supply and demand of $K_d - K_e$, which is felt in the marketplace as a shortage. However, if interest rates are free to fluctuate in response to market forces, such a shortage will be temporary. The market interest rate will rise to R_1, restoring equilibrium where supply and the new demand are equal. This new equilibrium will have the same normative significance as the old one did. Given the new set of forces in the marketplace the combination of R_1, K_1 is economically efficient.

Causes of market shortages. Number two: permanent shortage due to legal interest rate ceilings. Assume events proceed exactly as in case number one, just analyzed, up to the point where the interest rate must rise to restore equilibrium. Now assume the interest rate has been legally pegged at R_e, so that it is illegal for the rate to rise to R_1. If the rate ceiling is enforced and effective then it will cause a permanent shortage. The efficient level of capital, given the new forces

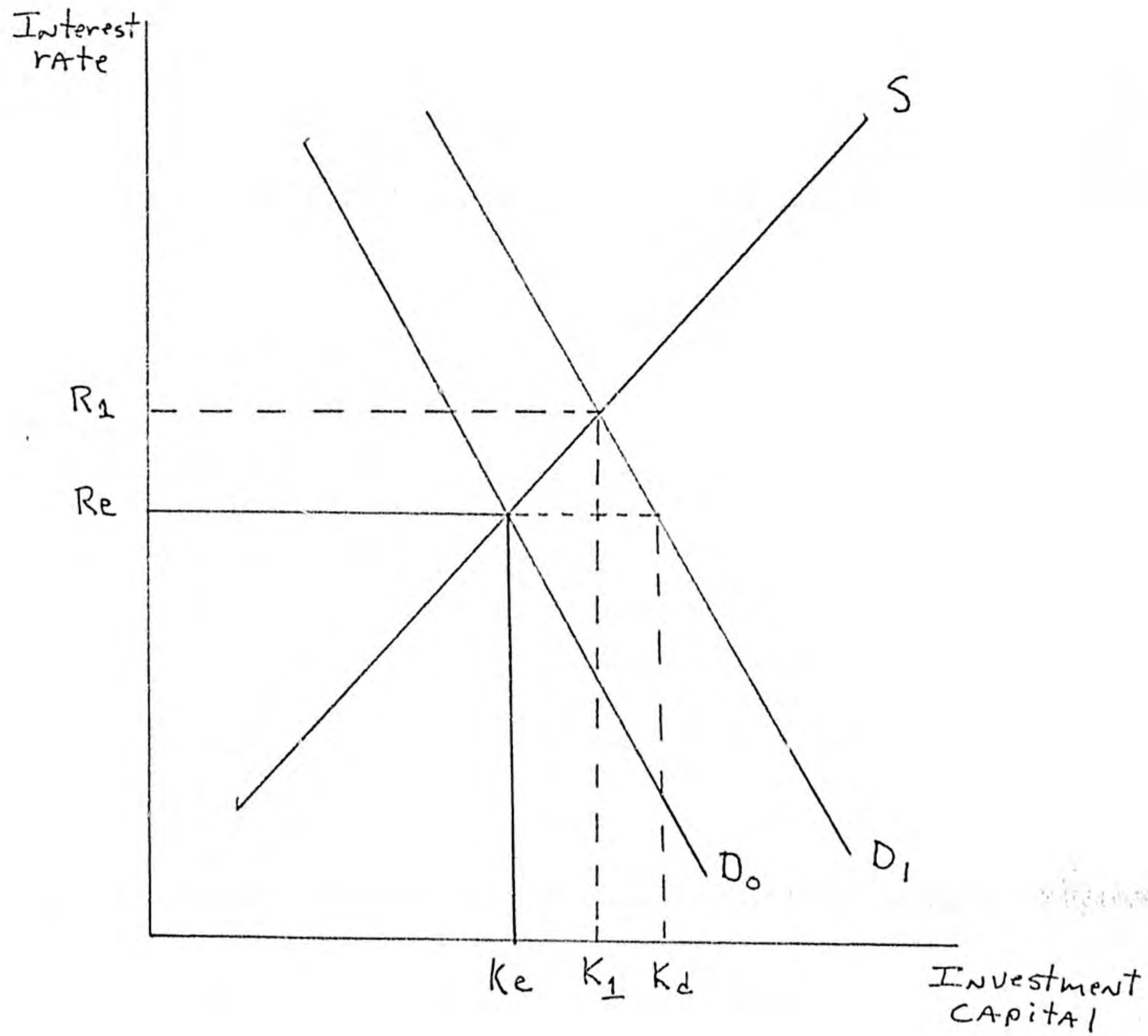

Figure 5

in the market would be K_1. However, due to the rate ceiling the supply of capital will remain permanently fixed at K_e, for a shortfall of $K_1 - K_e$. Further, the increase in demand at the low interest rate R_e will mean a felt shortage of capital of $K_d - K_e$. This permanent shortage of capital will be economically wasteful and inefficient in the sense defined earlier.

Causes of market shortages. Number three: temporary shortage due to short run monopoly power. If a particular market has only one supplier--a monopolist--rather than being competitive, then the general result will be a higher interest rate and a lower quantity supplied than would be the case in a competitive industry. This result is illustrated in Figure 6, where R_c, K_c is the competitive result, while R_m, K_m is the monopoly result. The monopolist reduces quantity and raises price in an attempt to increase profits. If he is successful and reaps a rate of return above that available in other markets he will attract new entrants eager to cut themselves in on the profits. In this particular case we assume free entry, which restores competition to the market, eraces the monopolist's power, and eventually drives interest rates down to the competitive level. Thus the shortage, $K_c - K_m$ is only temporary, and is ultimately eliminated by market forces.

Causes of market shortages. Number four: permanent monopoly power. Assume events proceed exactly as in case number three, above, to the point where entry of new firms is necessary to restore competition and eliminate the shortage. If, for some reason entry of new firms never takes place, then the monopoly survives and the shortage becomes permanent. Two possible sources of this condition deserve attention. First, it is possible that the monopoly may become permanent because the market

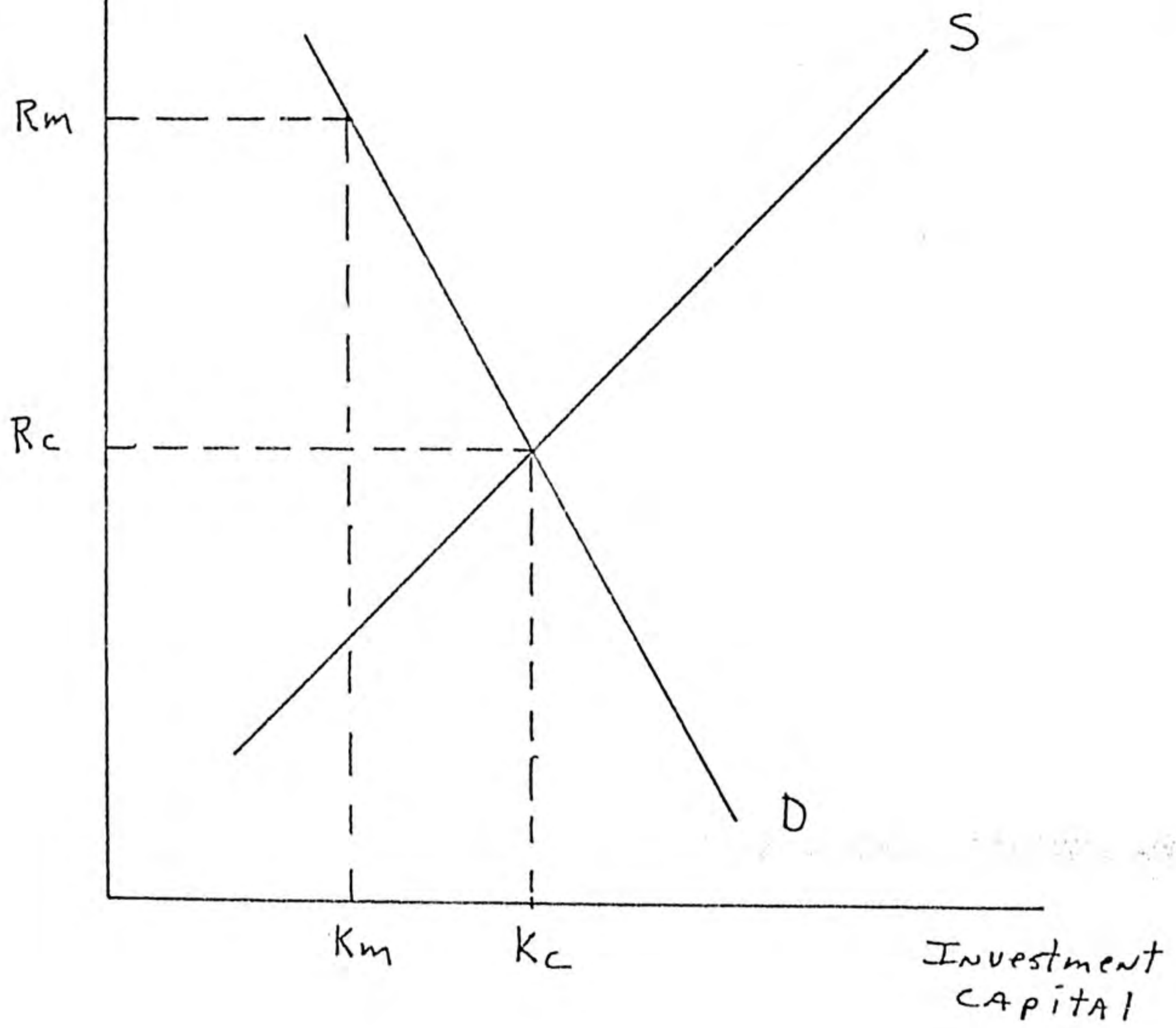

Figure 6

group policy. In medical insurance, to draw on that field for yet another example, the loading charge typically adds only about 10% to the premium for a group policy, but adds 50% to the cost of individual policies. Obviously, some people who would be willing to buy insurance if they could get it at group rates, would be unwilling to pay individual rates. (Others, of course, will insure against some risks even at very high cost, which provides a market niche for firms like Lloyd's of London.) Thus some forms of risk will remain uninsured because the market is unable to economically form groups, and must offer, instead, only individual policies at prohibitive cost.

Whether this constitutes a market failure is itself a matter of controversy among economists. Some, like K. Arrow (again) argue government as a "group" which encompasses all members of society can insure against most risks at a loading charge lower than that found in even large private group policies. Arrow thus argues much of the private insurance market fails by comparison with public provision of insurance. Critics of this position, such as M. Bailey and M. Jensen, argue that even if Arrow's position is correct in the abstract, in practice government has a history of providing services inefficiently and at high cost. Further, recent developments in the economic theory of government bureaucracy suggest that inefficiency and excessive cost may be inherent in bureaucratic behavior. In light of these criticisms it seems clear that there can be no *a priori* presumption that government can provide insurance more cheaply than the private market, and thus efficiently reduce business risk. Whether government can in fact do that would seem to be a subject for careful case by case study, focusing on realistic estimation of expected costs of government operation of insurance schemes.

is too small to support more than one firm. In this case potential entrants may be able to see that their entry will drive profits to below levels available elsewhere, and thus will choose not to enter the currently monopolized market. A second possibility, very relevant in many states, is that State franchising and branching laws pertaining to financial institutions may prohibit entry into particular markets, thus making competition illegal, protecting monopoly prices, and perpetuating local capital shortages.

Causes of market shortage. Number five: inadequate market mechanisms for risk pooling and risk insuring. Some economists, most notably K. Arrow, have argued that the market demand curve for capital is too far to the left because of the failure of markets to develop to allow firms to insure against risk and to pool various risks in a fashion which would reduce overall risk. Since firms must bear the risk themselves, it is argued, and since firms presumably consider risk a bad, they will react by undertaking fewer risky projects at every level of the interest rate. This shifts the market demand for investment capital to the left, as compared to a situation where all risk is pooled and insured against.

The market equilibrium with pooling and insurance is shown as R_e, K_e in Figure 7. The equilibrium with incomplete pooling and insurance is shown as R_1, K_1. The result is a capital shortage of $K_e - K_1$. Note, however, this is not a shortage which will be felt by firms which accept existing risk and risk-bearing arrangements as part of the economic facts of life, for the market will be responding to their demands for capital, and equating supply and demand. Rather, this is a shortage perceived by an outside observer who is looking at the world as it might have been, had institutions worked differently than they actually do.

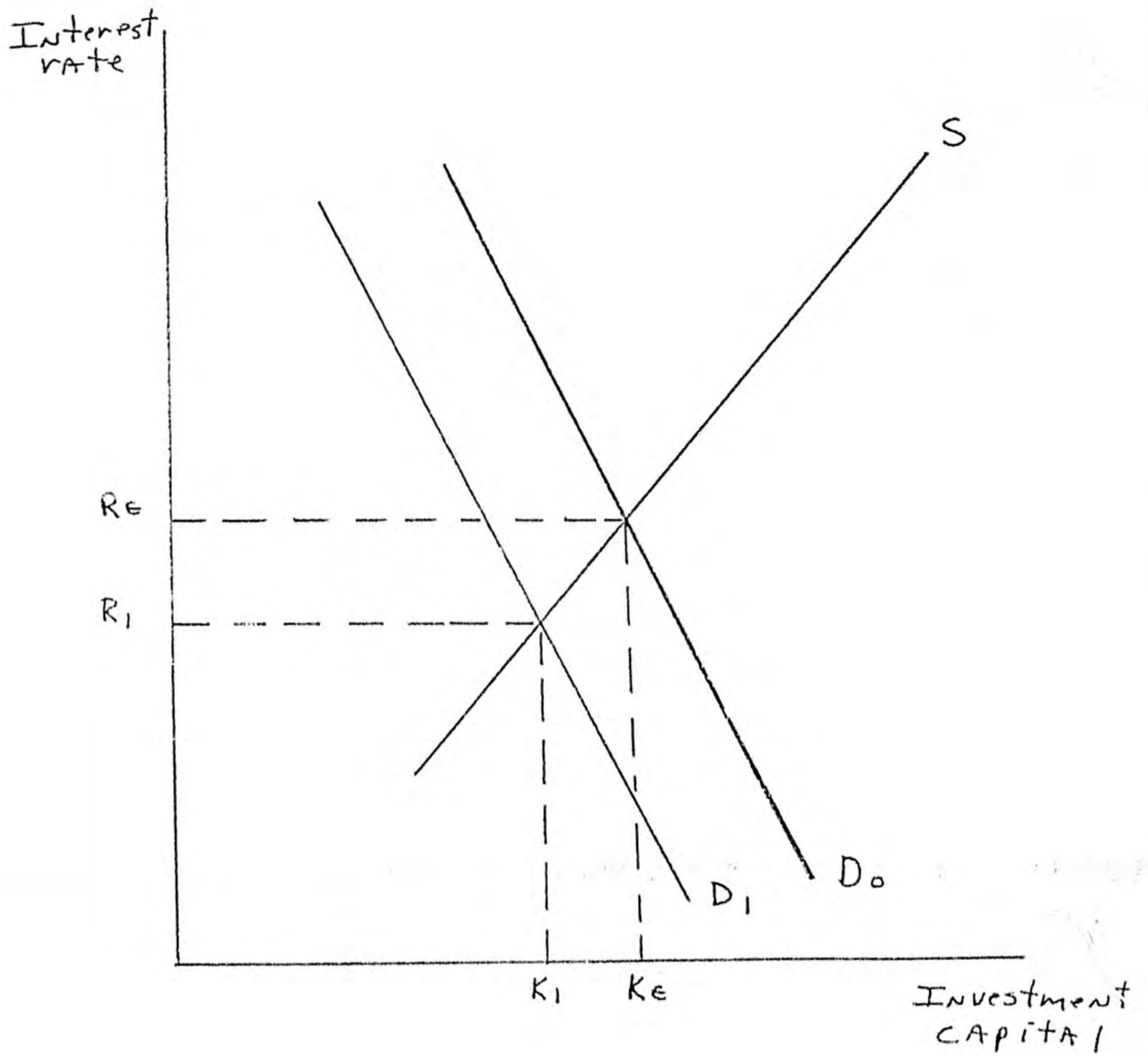

Figure 7

The existence, magnitude, and significance of this sort of market shortage is a matter of some controversy in the economic literature. This is primarily because it is not at all clear that all risks should be insured against. The two key questions are whether or not all risks are insurable, and whether the benefits of insuring against particular risks are significant enough to justify the real costs of insurance. These questions will be considered in turn.

To be fully insurable a risk must be random, out of the control of the insured. If not, then insurance will alter the behavior of the insured by freeing him from the consequences of his actions. This usually leads to the waste of resources. For example, a person's medical expenses are partly a function of the random occurrence of illness, and thus insurable; however, they are also a function of discretionary behavior of the individual--frequency of doctor's visits, following doctor's orders, choice of private hospital room rather than double room, and so forth, and thus to some extent are uninsurable. If insurance lowers the point-of-service price (to zero in many cases) patients will demand more and higher quality medical care. In insurance jargon this is known as "moral hazard". That is, the existence of insurance tempts the insured to take advantage of the lower price or cost of certain actions. Various devices such as deductibles and coinsurance have been developed to reduce the extent of moral hazard, but it is not possible to eliminate it completely, and as a result some risks are so closely related to the behavior of the insured that they remain essentially uninsurable.

Moral hazard is an extremely relevant concept for analyzing insurance of business risks. The risk of failure of certain capital investments may be partly related to things outside the control of the indivi-

dual firm--such as weather, national inflation, unforeseen changes in government policy, fishing or growing conditions, technological change, inflation of fuel and transportation costs, and so forth. However, failure of a capital investment may also be due to the firm's bad judgment, poor management, poor cost control, bad consumer relations, and so forth. If the firm is insured against loss, then obviously it has few incentives to be prudent and efficient. This moral hazard problem makes many business risks essentially uninsurable. The insurance markets will recognize this, and will not offer insurance for risks of this type. This will be economically efficient, and the absence of such insurance will not constitute a market failure.

A second reason why not all risks will be insured in the real world is related to the costs of providing insurance. A risk adverse person will always buy actuarily fair insurance. However, actuarily fair insurance will never be offered in the marketplace. Instead, all insurance premiums will include a "loading charge" to cover expenses, including a normal profit. If the loading charge (and thus the total premium cost) is large enough even a risk avoider will choose to self-insure (bear the risk), rather than purchase insurance.

Since there are certain minimum costs of designing and marketing insurance policies, premium costs will undoubtedly be too high to make insurance worthwhile for many small, relatively predictable, potentially insurable risks. The absence of insurance for such risks should not be considered economically inefficient. Another category of insurance which may get priced out of the market is insurance which must be written as a custom, individual policy, rather than a group policy. The loading charge will generally be much higher in an individual policy than in a

Causes of market shortages. Number six: shortage due to the nature of infrastructure capital. The market demand curve for investment funds reflects the willingness of firms to undertake real investment projects, and that willingness in turn varies with the firms' expectations of being able to reap the benefits of their investments. If firms are producing private goods (fish, shoes, etc.) which they can treat as their private property and sell in the marketplace, then they will be willing to undertake investment projects which they calculate to be potentially profitable. However, if particular projects generate primarily public benefits which firms cannot sell or otherwise capture, then such projects will appear unprofitable, and no demand for investment capital for such projects will be registered in the marketplace. In between these extremes are mixed goods, which generate both private, marketable outputs, and public, unmarketable benefits. If the private aspects are large enough, relative to costs, some of these projects may be undertaken, and a related demand for capital registered in financial markets. However, the demand will be understated from society's point of view, since the social benefits will not enter firms investment decisions. In more concrete terms, this will mean that mixed projects undertaken will tend to be too small and less extensive than optimal. If investment decisions on such projects are left purely in private hands, then, too little investment capital will be demanded, there will be a capital shortage as compared to social demands for capital, and the resulting real stock of capital will be inefficiently small.

It is generally argued that what is usually referred to as infrastructure capital is of this mixed nature, with the mix heavily weighted toward public benefits, and thus subject to serious shortages if

left to private capital markets. While this may generally be true, it is also important to be careful and cautious about categorizing projects as infrastructure. A project cannot be sensibly identified as infrastructure and thus the responsibility of the government on vague grounds that it would "open up" an area and stimulate development. Rather, it is necessary to estimate as precisely as possible the nature of the expected benefits, to classify those as private and public, and to make an explicit judgment as to whether or not private benefits are substantial enough to stimulate private investment in the project.

It would be generally incorrect, for example, to say that roads *per se* are infrastructure. Particular roads may be. But other roads may have essentially private benefits which can be captured by private firms, and thus such roads will be efficiently produced by the market. Logging roads, for example, generally fall in this category. While logging roads are usually short and local, the length of the road, in and of itself, has little bearing on whether markets will correctly allocate resources to its construction. Rather, the key questions are who the benefits accrue to, and whether or not a private builder can capture or charge for those benefits. A long road to a remote mineral deposit, for example, crossing no other roads, railroads, or navigated rivers, might be of benefit primarily to the firm owning and exploiting the mineral deposit. Further, if the road would make feasible spur roads to other exploitable properties the firm would have an incentive to identify the potential beneficiaries and approach them about building the main road as a joint venture, or failing that, to administer the main road as a toll road, and thus collect for external benefits created.

It is also important to note that such market responses to infrastructure opportunities may be short-circuited by government action. If the government had an ongoing policy of road building to stimulate economic development the mineral-owning firm of this example might adopt a strategy of not building, in the hope that the government would eventually build the road and provide it free of charge to all users. In this case, government policy would be crowding out private investment and creating a capital shortage in the private market.

Causes of market shortages. Number seven: uncertainty about government policies. Firms undertake investments on the basis of expected profits (often, of course, considering as well the variance around expected mean profit). Prediction of expected profits from many investments may be uncertain at best, due to the influence of many real economic factors beyond the firm's control. When, in addition, the political process generates uncertainty for the enterpreneur about what the rules of the game will be when his investment comes on line and begins to pay off, then potentially profitable investments may be deterred, and the private capital market may come to an equilibrium level far short of what would have been achieved in a more stable political environment.

In this context the case of the country of Nepal is both striking and informative. In the mid-1970's Nepal's Agricultural Development Bank and the Agricultural Projects Services Center identified a number of agricultural investment opportunities they estimated would produce 30-35 percent return on investment. Strongly believing these projects to be in the national interest the Nepalese government took a number of measures to promote private investment in these areas. It required commercial banks to lend at least 5 (later 7) percent of their total

deposits to farmers and small scale enterprise. To assure farmers access to credit it subsidized the establishment of branch banks in areas previously lacking banks. The Credit Guarantee Corporation was set up to guarantee up to 80 percent of agricultural and industrial loans. Potential investors were given access to the technical services of government agencies expert in project appraisal.

Despite all these stimulative measures agricultural investment in Nepal remained at low levels. The best explanation for the failure of agricultural investment to respond to the above measures appears to be that while the government was giving with one hand, it was taking with the other. Its income tax assessments were arbitrary and unpredictable, its excise taxes were changed capriciously from year to year, it imposed price controls with the incompatible objectives of both raising prices to farmers and lowering them to consumers, it imposed controls over the movement of goods within its boundaries, as well as into foreign trade. In short, it constantly altered the rules of the economic game, and created great uncertainties for enterpreneurs about what prices, taxes, and trade restrictions they would face at any given time in the future.

Further, and even worse, the pattern of government action made it clear to entrepreneurs that most changes in policy were directed at industries and sectors which had begun to generate visible profits. Quite predictably, entrepreneurs responded to these conditions by refusing to make the investments and take the risks necessary to develop Nepal's agricultural sector.

The lesson here seems sufficiently clear. Government produced risk and uncertainty about the treatment of future profits can negate strong

development incentives, and slow or eliminate private capital formation. If government arbitrarily increases the taxes on any sector or industry just because it has become more profitable, enterpreneurs in other sectors will read this as a message that if they become successful they too will be singled out for special treatment. This will reduce their estimates of after-tax profits to be expected from various investments, and thus reduce the amount of investment they undertake.

Causes of market shortages. Number eight: effects of taxation and regulation. Government taxation and regulation of particular financial institutions will raise the costs of those institutions, shift their supply curves up and to the left, and cause the equilibrium amount of capital produced to be less than if such taxation and regulation had not been imposed. The policy relevant questions here are (a) whether the regulations serve any useful function, and if so, whether the same result could be achieved with some other policy tool which would have less effect on the output of capital, and (b) whether the taxes are actually charges for some social costs of the industry, or merely revenue raising devices, and if the latter, whether other taxes could raise the same revenue with less disruption of the capital market.

5. The concept of normative shortage.

Much popular and political conceptualization of capital shortage falls into the category of normative shortage. As noted above, a normative shortage is one which is defined with reference to individual norms and values. Rather than focusing on the demand for capital, the normative shortage concept usually centers on perceived "needs" for capital. Normative shortages can be perceived even when capital markets exhibit none of the problems described in the previous section.

The basic difference between a market shortage and a normative shortage can be easily understood with the aid of a simple graph. Let the equilibrium of a well functioning capital market be shown by the intersection of supply and demand in Figure 8. The equilibrium, economically efficient amount of capital generated in this market is Q_e. There is no market shortage. Assume, however, that some interested party believes that a particular amount of capital is "needed" in this market, at this time. Let that amount be K_n, and let the vertical line N be the capital needs curve implied by this person. This person will then perceive a capital shortage of $K_n - K_e$.

Several specific forms of the normative shortage concept will be discussed below. First, however, it will be useful to critically examine the notion of capital "needs". The needs concept is frequently used in public discussion of many different issues. We are told that we need more national defense, more school, highways, tennis courts, medical care, and so forth. This approach to public policy has been criticized by economists on a number of grounds. First, needs are subjective and individual. What one person sees as a need, another may not. Thus there is no way to objectively determine what public needs are for any particular good or service.

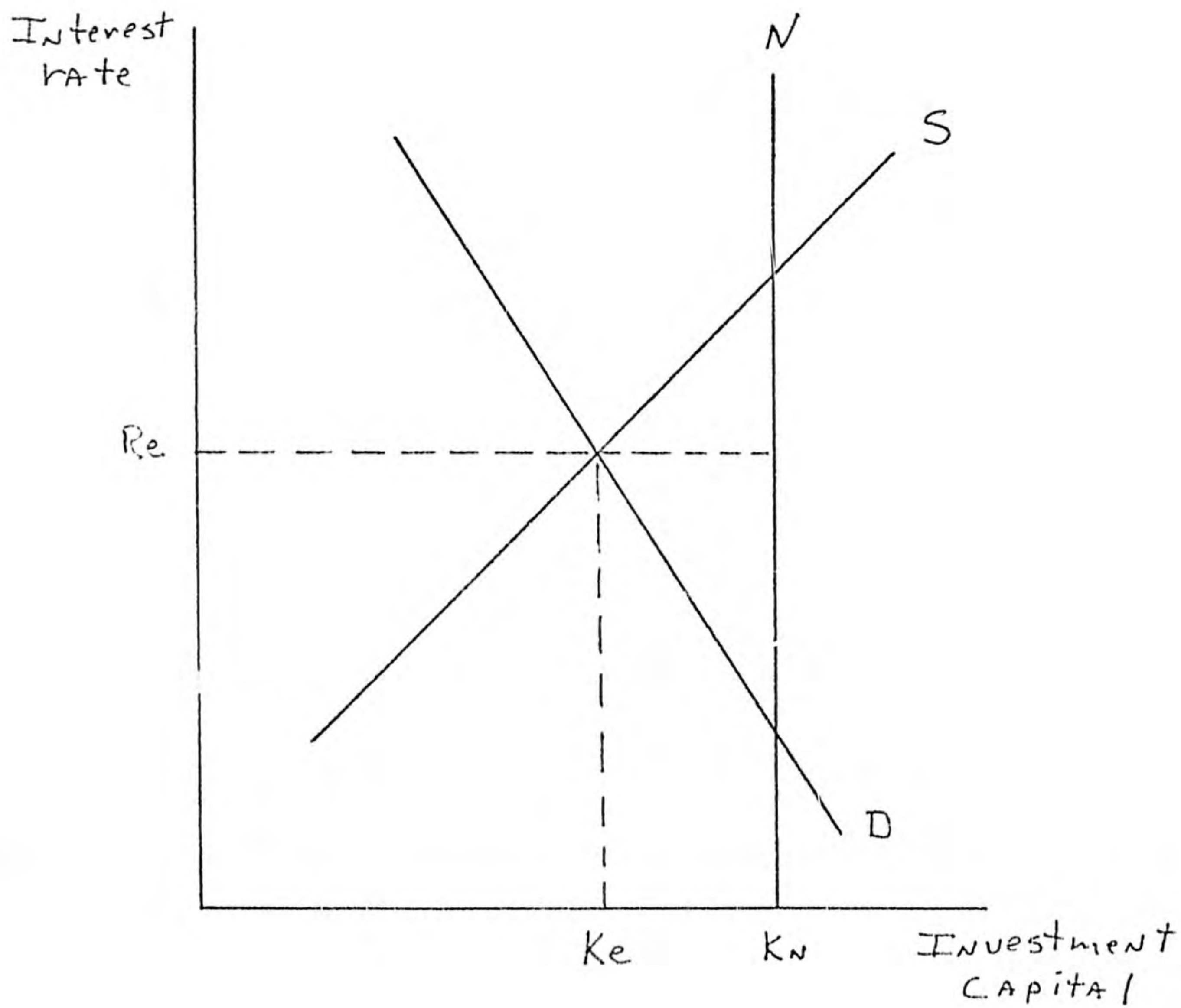

Figure 8

Second, needs are proclaimed as if there were no overall scarcity of resources. That is, if all the needs perceived by various parties were added up they would be found to far exceed the capacity of the economy to produce output. The needs concept itself provides no mechanism for deciding which needs are most important. When the reality of resource constraints is brought home to those who think in terms of needs they are forced to develop concepts of "urgent needs" and "high priority needs", but these are just ad hoc verbal expedients, which serve as crude, unsatisfactory, and unsophisticated methods of defining relative values.

Third, and perhaps most important, the needs concept ignores cost. Does an individual "need" a new car if cars cost $5,000? Perhaps. Would he still "need" only one if the price dropped to $2,000? How many would he need if price went to $20,000? Obviously, people do not behave as if they had fixed, absolute, immutable needs for various goods and services. Instead, they behave as if they had demands, which vary inversely with price. The same is true on the production side of the economy. Firms do not have fixed needs for particular amounts of labor, capital, land, raw materials, and other inputs. Instead, they have choices as to how they will organize production, and their actual choice will depend largely on the relative prices of various inputs. If relative input prices remain constant for a long period of time firms may get used to doing things a certain way in response to these prices, and there may be casual talk about needing a certain amount of, say, capital to get a job done, but it can be confidently predicted that in most cases if capital becomes more expensive relative to other inputs firms will soon find ways to economize on capital, and some of their "need" for capital will melt away.

The same line of reasoning holds on a social level. The concept of public or social needs is at least misleading, and usually wrong. There are no needs for anything. There are only demands, which vary with price. Does society, for example, need more doctors, because we need better health? The questions to be asked are these. Do we individually, and as a society, want a given amount of improvement in health, no matter what the cost, or are we willing to improve our health more the less it costs us, and less the more it costs us? If we have set a target level for improvement in health do we need a given number of doctors to achieve that target or do we have the option of producing health using fewer extra doctors and more extra physician's assistants, nurses, machines, drugs, and so forth, or of producing health through changes in individual patterns of diet, drink, smoking, exercise, etc? And if we have such options should we not, as a society, explore their cost and choose the cheapest method of achieving our objectives? Once public choice problems are phrased this way "needs" seem somehow to evaporate, and the needs concept stands revealed as an impediment to clear thinking.

Having looked in the abstract at some problems inherent in the notion of normative shortage we now turn to analysis of specific normative shortage arguments.

Normative shortage arguments. Number one: infrastructure shortage. As earlier noted, private capital markets will generally fail to produce optimum amounts of the kind of infrastructure investment which produces widespread public benefits. Thus there can be positive or market shortages of infrastructure capital. In addition, though, the infrastructure concept can be a useful ploy for special pleading by groups

standing to benefit from large scale government investment. Thus arguments are advanced that certain projects are "needed" to open up an area, create jobs, and develop the economy, even though economic analysis would show the costs of these projects to exceed the benefits.

That these arguments are often influential is due to several factors. First, many people are confused about the difference between costs and benefits. In popular discussion, for example, jobs and economic activity are usually touted as benefits of government spending, whereas, in fact, from a social point of view, they are costs. The benefits of capital investment projects are the goods and services which ultimately are produced as a result of the projects. The costs are the resources used up and the opportunities foregone in undertaking the project. Thus the use of labor time, raw materials, machine hours, managerial time, and so forth in a project is a social cost, because those resources are used up, and thus unavailable for other productive purposes. Clearly, the government in its fiduciary responsibility to the public has an obligation to minimize these cost, rather than maximizing them by pursuing policies of job "creation".

Jobs represent private benefits to those holding them. Orders for concrete, steel, new machines, earthmoving services, transport services, and so forth represent private benefits to those receiving them. But for every dollar of these benefits there is a dollar of private costs; every dollar paid to workers, suppliers, and transporters must come out of someone else's pocket. Thus from the viewpoint of a society defined to include both receivers and givers, payment for work and contracts on infrastructure capital just represents a transfer of income from some groups in society to others.

Whether such transfers have been socially productive cannot be determined without looking at the output which actually results from the projects undertaken. The least favorable case is the boondoggle, leaf-raking sort of project which creates no socially valued output. In this case, society has incurred the costs of using up various valuable resources, and has gotten in return only a transfer of income from some groups to others. Analytically this sort of project is indistinguishable from public welfare, and should be judged by the same standards as other welfare programs, namely, its progressivity, its cost compared to other redistribution mechanisms, and its indirect effects on various social indicators such as crime, alcoholism, and divorce statistics. The boondoggle is obviously a real danger in infrastructure expenditure. It may take the form of construction of "white elephants" in rural areas, or, subtly, of building things too big, too fine, too strong, or too heavy.

More common, though, is the infrastructure project which does create some socially valued output, e.g., a dam which produces electricity, navigation, irrigation, and flood control benefits, but which costs more to construct than the benefits are worth. In this case, part of the cost of the project is recovered through the production of benefits, and thus part of the payment to workers, suppliers, transporters and others represents compensation for value received, but the remaining part is pure cost, and is a form of public welfare for those receiving it. Advocates of spending on capital "needs" in such cases often emphasize the "public interest" in their presentations, because they can now point to r[illegible] benefits which will be forthcoming if their pet projects are undertaken. The groups previously identified will be joined in this

advocacy by any others who can reasonably expect to enjoy the coming benefits free of charge or at subsidized rates. Implicit in all such advocacy is the implication that the existence of any benefits at all is sufficient to justify public investment. This implication, of course, cannot survive the light of day; public investment is justified only if net benefits will be produced, and, further, is best justified at the project level where net benefits are maximized.

A second reason why normative capital shortage arguments often succeed has to do with the distribution patterns of the costs and benefits of public investment. Typically, the private benefits of income earned from construction projects are heavily concentrated in a relatively few workers, suppliers, and transporters. These persons all have big stakes in seeing that various projects are funded, and thus find it worthwhile to invest in political action, lobbying, campaign contributions, and so forth to see that their views get full hearing and consideration. The costs of government spending, though, are usually spread thinly through the population via the tax system, and thus few individual taxpayers have much to lose from a decision to undertake any one project, or much to gain from informing themselves and taking political action to block wasteful projects. The net result is a political bias in favor of closing various normatively defined capital gaps.

Normative shortage arguments. Number two: an income shortage viewed as a capital shortage. Income disparities exist at national, state, and local levels. It is not unusual to find those concerned about the poor advocating, at all three levels, capital spending in low income regions to first, provide income from jobs, and second, provide improved living standards once the real physical capital is in place. Sometimes

this advocacy is based on an argument that there has been a market failure and that capital spending will produce real benefits in excess of its costs. But more often this policy is proposed out of a normative argument that such spending should be made irrespective of narrow economic calculations, just to help the poor.

If the plea for more capital spending is based on a positive argument then the alleged capital shortage should be investigated just as any other, to determine whether it actually exists, and, if so, how serious it is. On the other hand, if the shortage is normative then it should be pointed out that the real shortage of concern is one of income, not of capital, and that providing capital is just one of several ways to provide more income. The alternative ways of providing more income in a particular case should be identified, and their pros and cons analyzed and weighed. There is no *a priori* presumption that providing capital is the most effective or efficient way to deal with an income shortage.

In general, the alternatives to capital grants are cash grants, income in kind, subsidized goods and services, price and wage controls, and retraining and relocation subsidies. Issues to be considered in choosing among the alternatives are their effects on work and investment incentives, their effects in terms of real resources used up, their effects on the welfare of givers relative to the welfare of recipients, and their effects in terms of displacing private, voluntary economic activity. A brief survey of these issues will be useful.

Incentive effects. Any program of income redistribution will have effects on the incentives of both givers and recipients. It is generally argued that taxing higher income groups reduces the return to them

from work and risk-taking, and thus will reduce both their work effort and their willingness to invest in risky undertakings. At the other end of the income scale, it is argued, giving income to the poor reduces their incentive to help themselves out of their plight. None of this is to say income redistribution is undesirable. It is merely to point out that there are costs involved in income redistribution, in terms of effects on the overall level of economic activity. The question of real importance, though, is how those costs vary with the mechanism of income redistribution chosen.

Some mechanisms are notorious for their negative effects on work incentives. Unemployment insurance, for example, nearly destroys a recipient's incentive to take a low paying job because all unemployment benefits stop when work resumes, and thus the net gain from working may be negligible. One detailed study estimated unemployment insurance to have the same effects as an 86% marginal tax rate--a rate far in excess of that levied on the highest income people in our society. Another mechanism of income redistribution, price supports, often has the opposite effect--it stimulates more work and investment. Unfortunately, though, the work and investment are usually misdirected, and lead to overproduction and unneeded surpluses of particular goods--agriculture price supports and the resulting commodity surpluses of the 1950's are the classic example. On the other hand, a third mechanism, the negative income tax, was explicitly designed with work incentives in mind and has built in flexibility in the amount of incentive desired.

Use of real resources. Any program of income redistribution will have some effects on the use of real resources because it will cause the givers to reduce consumption, and allow the receipients to increase con-

sumption, and these effects will generally not be symmetrical, so some industries will suffer and others will make net gains. In addition to this, though, individual income redistribution mechanisms may have their own special effects on resource use. Price ceilings, for example, cause resources to flow out of the price-regulated industry, while price floors generally cause resources to flow in. In both cases, if the markets were competitive to begin with, the change in resource use will be wasteful and inefficient. Income redistribution via public production of housing, medical care, etc. also directly uses up resources, and usually uses up more resources in bureaucracy and administration than if the same goods and services had been produced in the marketplace. The negative income tax, on the other hand, requires only the extra real resources necessary to expand existing income tax systems to handle negative income tax calculations and payments.

Givers vs. recipients. One important consideration in determining the form for income redistribution to take is conideration of whose tastes and preferences are to be served by redistribution. That is, given that a specified amount of money is to be used for redistribution to a certain group, is it to be provided in the form the recipients most prefer, the form the givers favor, or in a compromise form?

Economists generally argue that if the purpose of redistribution is to improve the welfare of the recipients, as they themselves see it, then redistribution is best made in cash, because cash allows individuals the fullest freedom to buy the goods and services they rank highest. If instead redistribution is in the form of goods and services themselves there is no guarantee the mix of goods and services provided will be the one recipients would most prefer, and a certainty that some re-

cipients will receive less than maximum satisfaction if recipients themselves differ in tastes and preferences, but are all given the same mix of goods and services.

On the other hand, if redistribution is made to improve the welfare of the recipients as judged by the givers, or if redistribution is made to cater to the wishes of the givers by removing visible manifestations of poverty which affront the givers, then cash is generally not the preferred form of redistribution since it removes control of the ultimate mix of goods and services consumed from the hands of the givers. Here grants of specific bundles of goods and services are generally to be preferred. Examples would be food stamps, public housing, education, and medical care. Even when income grants are made in kind, of course, funds freed from purchase of the subsidized goods may then be diverted by the recipients to other uses which the givers do not approve of--luxury goods, alcohol, drugs, gambling, etc. But unless the granted goods are fully marketable and can be resold by recipients at full market prices, the diversion of granted income to meet the preferences of the recipients will generally be less than if cash were given.

Closely related to the issue of whose preferences to satisfy is the question of who should act as the entrepreneurial and purchasing agent for the poor. Assume that the poor want to spend part of their income grants for schools, community TV antennas, and other capital improvements. One alternative would be to simply give individuals cash grants and then leave it up to them to use local government and quasi-government organizations to pool resources and contract for the construction of the desired capital. Another alternative would be to have the granting level of government act as the pooling, planning and contracting agency for the poor, and simply make the grant in the form of capital

improvements. The hidden problem here, of course, is that for its own reasons the political system may use this line of reasoning to make capital grants even when that is not the first choice of the poor.

Displacing private economic activity. Almost any system of government income redistribution will discourage one voluntary activity, namely, private charity. This is so because helping the poor has public goods characteristics. If anyone, private or public, helps the poor, all who value this action benefit, whether they contribute or not. This situation creates the usual free rider motivation and leads to undersubscription to private charity. The failure of voluntary charity to undertake the optimum amount of income redistribution creates a role for government to correct this failure. However, when government enters the income redistribution business many individuals reduce or cease their contributions to private charities, feeling that government is going to do the job anyway, and now viewing part of their taxes as a charitable contribution. This effect has been very strong in the U.S. in this century, with government charity crowding out much private charity.

In addition, though, specific mechanisms may have additional impacts on economic activity. Public housing, for example, often crowds out private housing. The simplest way for this to take place is for public housing to be rented at subsidized rates well below market rates. Private housing cannot compete, while public housing has a waiting list. The queue of eager would-be renters convinces public officials that there is a shortage of public housing, so they expand the stock of public housing, further crowding out private housing. A more roundabout way of crowding out public housing is to institute rent controls, which

drive down the rate of return on investment in private housing and eventually lead to a reduction in the private housing stock due to reduced maintenance and a lack of new construction. Then public housing is instituted to relieve the housing shortage.

Capital grants. How, then, do capital grants as a means of income redistribution stand up when evaluated in terms of these issues? First, capital grants clearly create work incentives, both for those directly receiving the grant, and through job creation. However, if the projects undertaken have no net benefits, much of the work undertaken must be considered wasted, unless one ascribes a value to work *per se*. A second problem is that the work may not go to the poor, although this can be controlled to a considerable extent by tying various hiring provisions to the grant. Second, capital grants clearly use up real resources in producing some form of physical output. Whether the use of these resources is desirable, of course, depends, again, on whether the projects undertaken generate net benefits. Third, it is not at all clear that capital is the form recipients would most like to receive their extra income in. Cash grants would probably be preferred. Givers, however, evidently feel differently. Fourth, capital grants are usually made at subsidized interest rates and thus attract many would-be borrowers who already have access to private capital markets. To the extent these applicants are successful, public lending crowds out private lending. Further crowding out may take place if unsuccessful applicants do not return to the private market, but instead defer investment plans, hoping to get subsidized government loans the next time they are eligible.

Normative shortage arguments. Number three: a shortage of subsidies. Government loan programs themselves can create normative capital short-

ages. Assume there are no positive shortages; the capital market is in equilibrium with supply equal to demand. Now the government starts up a small program of subsidized loans. The demand for these loans far exceeds the supply. Disappointed applicants feel there is a shortage of subsidized capital. Rather quickly people come to feel that the subsidized rate should be the norm and they speak of capital being available in private markets only at "high" rates. Complaints of capital shortage become common. Further, the government loan programs may have lower standards for screening applicants than do private suppliers. Soon people take the government standards as the norm, and begin to speak of private lending standards as excessive. Over time this characterization can metamorphisize into the belief that capital is "not available" from the private sector. In sum, if governments do not supply all the subsidized capital people want, on easy terms and conditions, people will begin to perceive a capital shortage, even if the private capital market was working perfectly before the entry of the government into the lending business.

Normative shortage arguments. Number four: the role of information and transactions costs. The fact that capital markets take into account information and transactions costs differences among loans of various types and from various sources gives rise to at least two additional normative shortage arguments. First, there are those who argue in effect that would-be borrowers should not be discriminated against on the basis of the above factors. When they observe that groups, areas, and industries get less capital on less favorable terms when they are high information cost and high transactions cost borrowers, they claim these borrowers are suffering from a capital shortage.

Second, there are those who argue that the mere existence of information and transactions costs means markets are "imperfect", and generate too little investment and capital in equilibrium. These arguments will be considered in turn.

All economic transactions involve information and transactions costs. Information costs are the costs to both buyer and seller of acquiring and processing information necessary to make decisions. Transactions costs are the costs of arranging, formalizing, and enforcing contracts, making exchanges, conducting transactions.

In capital markets the would-be borrower must invest time, energy, thought, and money to discover where loans are available, what terms and conditions they are available on, the amount and competence of service and advice offered by various lenders, any differences between lenders' stated policies and actual policies, and so forth. Lenders, on the other hand, must collect information relevant to evaluation of the economic prospects of the would-be borrower, to the character, creditworthiness, and managerial competence of the applicant, and so forth. These are real costs and will play an important role in determining lending patterns. Information costs will increase with the geographical distance between parties, with the infrequency of contacts between parties, with cultural differences between parties, with the unusual or unique nature of an applicant's business or specific project, with the lender's unfamiliarity with the applicant's community or industry, and so forth.

Lenders must charge interest rates which cover all their costs, including information costs, and still allow them normal profits. Thus higher interest rates will be charged to higher information cost bor-

rowers, and, in the extreme, if lenders estimate that there would be insufficient business from various groups, industries, and areas at the levels of interest rates they would have to charge to cover information costs, they may not seek or accept business from those quarters. This can obviously be frustrating to individuals in these categories who believe themselves to be honest, hard working, creditworthy people with good ideas and good business prospects. However, if this is the result arrived at by a competitive capital market then it is economically efficient, and does not constitute a positive capital shortage. Any definition of it as a shortage must be normative, and based on some notion that people should not be penalized in the capital market because there are high costs of doing business with them. What this sort of position seems to ignore is (1) if interest rates to high information cost borrowers do not cover all costs, then interest rates to low information cost borrowers will have to be raised to compensate for this, and there is no obvious argument which says this is fair to low information cost borrowers, and (2) forcing low cost borrowers to subsidize high cost borrowers will reduce the amount of investment undertaken by low cost borrowers and generally reduce the expected rate of return from any given amount of investment undertaken.

All the above arguments apply to transactions costs in capital markets as much as to information costs. Transactions costs will increase with the same variables that increase information costs. Perhaps from the perspective of this study the most important and relevant of those variables is geographical distance between parties. Distance slows communication, raises its cost, and often effectively precludes face to face dealings between lender and borrower. This is very serious

from the point of view of the lender when he contemplates problems of servicing a loan and dealing with borrowers who get behind in their payments. The experience of bankers is summarized in their rule of thumb: "never loan where you cannot go".

Here, again, transactions costs are real costs. Anyone who argues that those costs should not be paid by high cost borrowers must face the reality that if high cost transactions are undertaken, someone must pay the costs. And if someone has to pay, who better than the person responsible for those costs being high?

The second general normative shortage argument related to information and transactions costs is on a somewhat different level than the first argument. It is the contention that the mere existence of such costs implies capital markets are "imperfect" and thus misfunction and produce too little capital. This contention can be dismissed rather easily. Essentially, it reveals a confusion about the terminology of microeconomic theory. The basic microeconomic theory of markets was developed some years ago assuming, among other things, zero information and transactions costs. Unfortunately, the terms "perfect market" and "imperfect market" were applied, respectively, to markets meeting all the assumptions of the theory, and markets falling short on some assumptions. An "imperfect market" in this terminology, then, just means a market which is not well described by the basic theory. It does not necessarily mean a market which fails to function well, or which is a good candidate for government intervention.

Some imperfections, such as monopoly and externalities, do distort the workings of markets and cause misallocations. Other imperfections, such as transactions and information cost are not seen as distorting, in

and of themselves. Further, the basic core of the theory of markets has since been expanded to more complex market models which treat information and transactions costs as normal cost, pretty much on an equal footing with say, production and distribution costs. Transactions and information cost are now generally seen as part and parcel of all economic activities, not as imperfections necessarily having market failure implications. (Although certain kinds of information may have public goods characteristics, and thus raise the market failure implications usually associated with that category of goods.)

The most interesting public policy questions related to information and transactions costs have to do with the relative efficiency of various institutions in dealing with such costs. Here, two fallacies are often encountered. The first is implicit in the above discussion. It is known as the nirvana fallacy. It consists of comparing whatever institution currently exists to the nirvana world of "perfectly" functioning markets, and labeling the existing institution as deficient because it does not come up to the standards of the model. The temptation to follow up the first fallacy with a second is seldom resisted. The second fallacy is the grass-is-always-greener fallacy. It consists of asserting that since the current institution is imperfect it is clear that it sould be discarded in favor of a new institution. Obviously, it is easier to make this proposal if one is completely innocent of any experience with the alternative institution. In reality, of course, we live in an imperfect world, and all institutions have "imperfections". Thus the relevant choice is between these imperfect institutions, not between one of them and an ideal, with another winning by default. In the real world institutional changes should not be made lightly. If

we are going to trade one set of imperfections for another, we had better find out beforehand what the terms of trade really are, rather than assuming that they are favorable.

6. General policy considerations.

Specific policy suggestions for Alaska's capital shortage problems will be made in the next section. Here, though, at the end of this discussion of conceptual issues, some general comments on policy are in order.

A first, very important, point to be made is that "do nothing" is always a relevant policy option if capital shortages are found to exist. Doing nothing would be an excellent policy choice in a number of circumstances. In some cases nothing should be done because the problem is minor, and not worth the cost of correcting. (And there can be no doubt that all active policies involve costs--costs of designing, implementing, and monitoring policy, plus compliance and avoidance costs imposed on private parties.) Unfortunately, this counsel often falls on deaf ears. Every economist knows of cases where a molehill of a problem has been used to justify a mountain of policy.

In other cases nothing should be done to correct capital shortages because the problem is temporary and self-correcting, and an active policy might actually slow down the correction process, or even perpetuate the problem. This is generally agreed to have been the case, for example, in Federal regulation of transportation, where temporary, local monopoly power of some railroads was used as a basis for developing an institution, the Interstate Commerce Commission, which as largely functioned to repress competitive forces throughout the transportation sector.

A second important policy notion is that "the cure should fit the disease". If capital shortage has a specific cause then that cause should be attacked directly. While this sounds obvious and sensible,

it is not the course of action typically taken by government. More often than not government discovers a problem and then systematically selects a solution which expands the size of government and its role in the economy, whether that is the best solution or not. The case of urban housing shortages, previously mentioned, can be cited as a prime example. The most serious urban housing shortage in the U.S. is, and has been for some time, in New York City. The primary cause of this shortage is rent control, a government policy. Instead of attacking the shortage by attacking rent control, the political system has responded by getting government into the housing business--an expensive, inefficient, and ineffective reaction to a serious problem.

This line of argument is directly relevant to the capital shortage problem in rural Alaska. Whatever capital shortages exist in rural Alaska appear to be largely, if not completely the result of policies of the Federal government and the State of Alaska. The relevant cure is to alter or abolish those policies. Instead, we see both levels of government reacting by getting deeper and deeper into the business of lending money. Much of this government lending supplants rather than supplements private lending. It thus has the effects of reducing the size of the private lending industry, reducing the number of lending institutions and thus reducing competition, and perhaps raising per unit costs of lending through a reduction in the average size of lending firms.

A third general policy consideration is that it is seldom a good idea to develop policy by looking at what has been done elsewhere, by other governments, to deal with similar problems. Other governments may be making serious policy mistakes, may be using institutions which do not achieve what they are supposed to, which have huge, hidden costs,

but which survive because they have bought political constituencies through the subsidies they provide. Do not take survival, or strong political support for an institution as evidence that the institution "works". To determine whether or not an institution works in any meaningful sense it is necessary to determine how it has actually improved the problem it was supposed to deal with (and that involves determining what portion of improvement in a situation is due to the institution, and what to other factors), and it is necessary to develop a full assessment of the costs, open and hidden, of operating the institution. On these grounds many government institutions, commonly described by the political system as "working" are actually miserable failures.

In this connection it is important to take a hard look at the pattern of government evolving in the U.S. which generates growing numbers of special interest subsidy programs, each of which concentrates benefits heavily on some group, and spreads the costs thinly through the population via the tax system. This pattern of government has many drawbacks. First, as a system for redistributing income this arrangement of multiple subsidies is hopelessly complex and nearly impossible to fully comprehend. Ideally we would like to know whether our income redistribution effort is on balance progressive or regressive. But a system of subsidies works at cross purposes. Any individual may benefit from several subsidies, but have to pay higher prices and taxes because of others. The net effect is not easy to determine for the individual, or for areas, occupations, or income classes. It is no exaggeration to say we really have almost no idea what we are really accomplishing with this hodge-podge of subsidies. From this point of view we would be better off to abolish all subsidy programs and redistribute income simply and directly by tax and transfer.

A second, closely related problem is that a system of subsidies fails on one of the fundamental principles of public finance--the principle that equals should be treated equally. Subsidies are almost always tied to characteristics of people other than their income levels, and thus fail to treat people with equal incomes equally.

A third criticism of subsidies is that they generally have net costs to society. That is, they do not simply transfer income from one group to another, leaving total income unchanged. Rather, they distort peoples' decisions about what to produce and how to produce, and end up putting resources to inefficient use, and thus reduce the total income the economy can generate from its resource base. Examples previously cited, which are quite representative in their effects, are agricultural price supports, which waste resources in production of surplus crops, and rent controls, which waste resources by causing deterioration and abandonment of buildings, and by forcing construction resources out of rental housing into less valued uses.

A fourth, and major, effect of subsidies is specific to the provision of capital and other subsidies to promote economic development. Many governments around the world have tried to stimulate viable economic development through complex and far reaching programs of capital subsidy. In many cases these governments have recognized the tremendous productive potential of private enterprise and have tried through subsidy to harness that potential to achieve development goals. Seldom have such efforts succeeded. For the most part subsidy programs rather than harnessing the energy and productivity of free enterprise have destroyed it. The destruction has been at the very heart of the market system, for what government policies have done is transform profit maximizing firms into subsidy maximizing firms.

The profit maximizing firm tries to produce products that will sell, tries to hold costs down to increase profits, is constantly alert for new products, new production methods, new markets--for anything that will give it an edge. The subsidy maximizing firm, on the other hand, doesn't care what it produces, doesn't care whether it holds costs down, or whether it uses capital intensive or labor intensive methods of production. All its energies are devoted to doing whatever will allow it to qualify for subsidies; it produces what is subsidized, it uses lots of whatever inputs are subsidized most generously, it locates wherever it can get the most subsidies. It is alert and aggressive, and looking for opportunity--but opportunity is defined in terms of anticipating where the government subsidy spigot will next open up.

The real tragedy, of course, is that subsidy maximizing firms do not provide a viable economic base for a country. They have no real substance, and when the subsidies stop, they melt away, leaving an undiversified, weakened economy.

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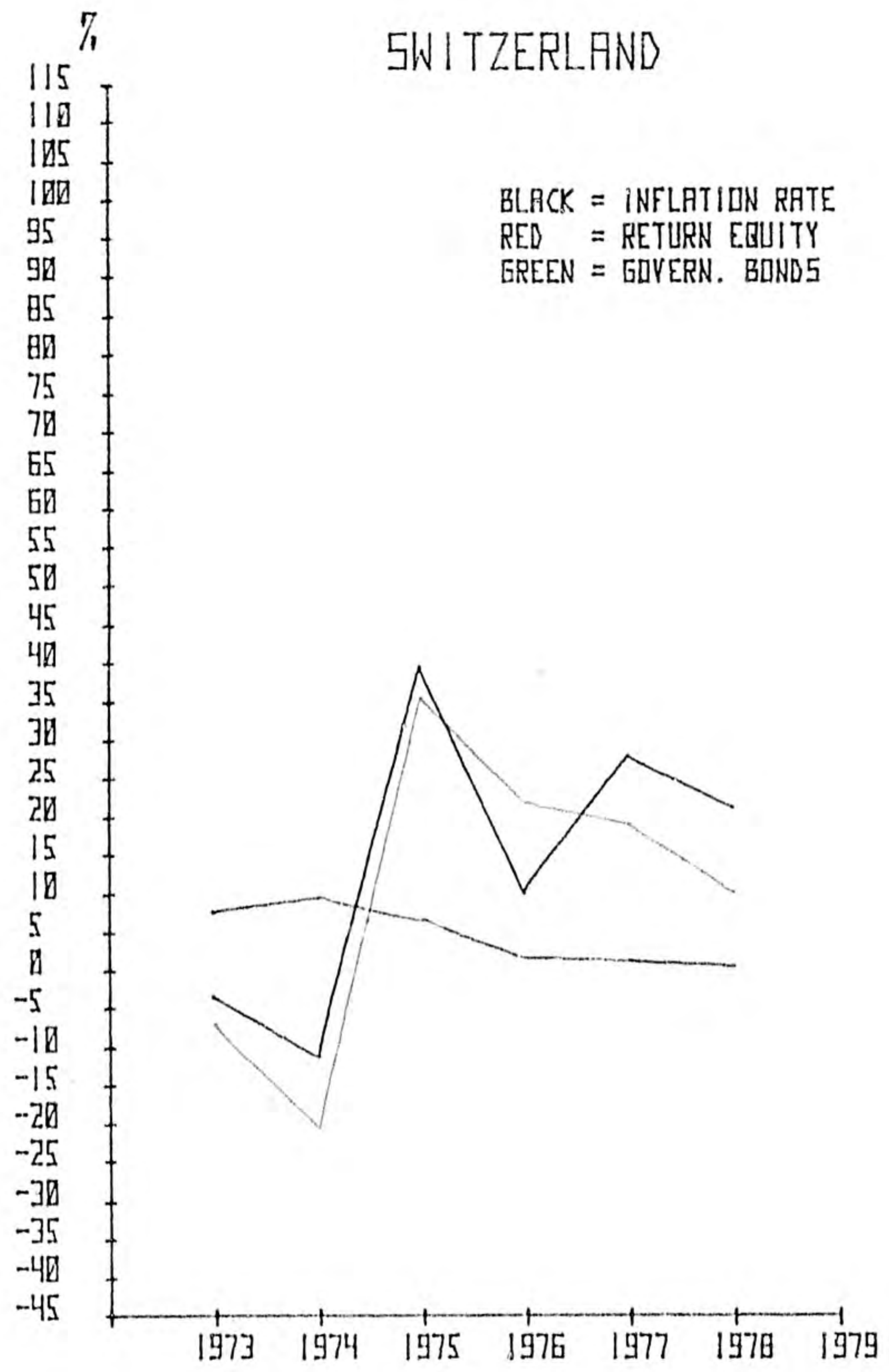
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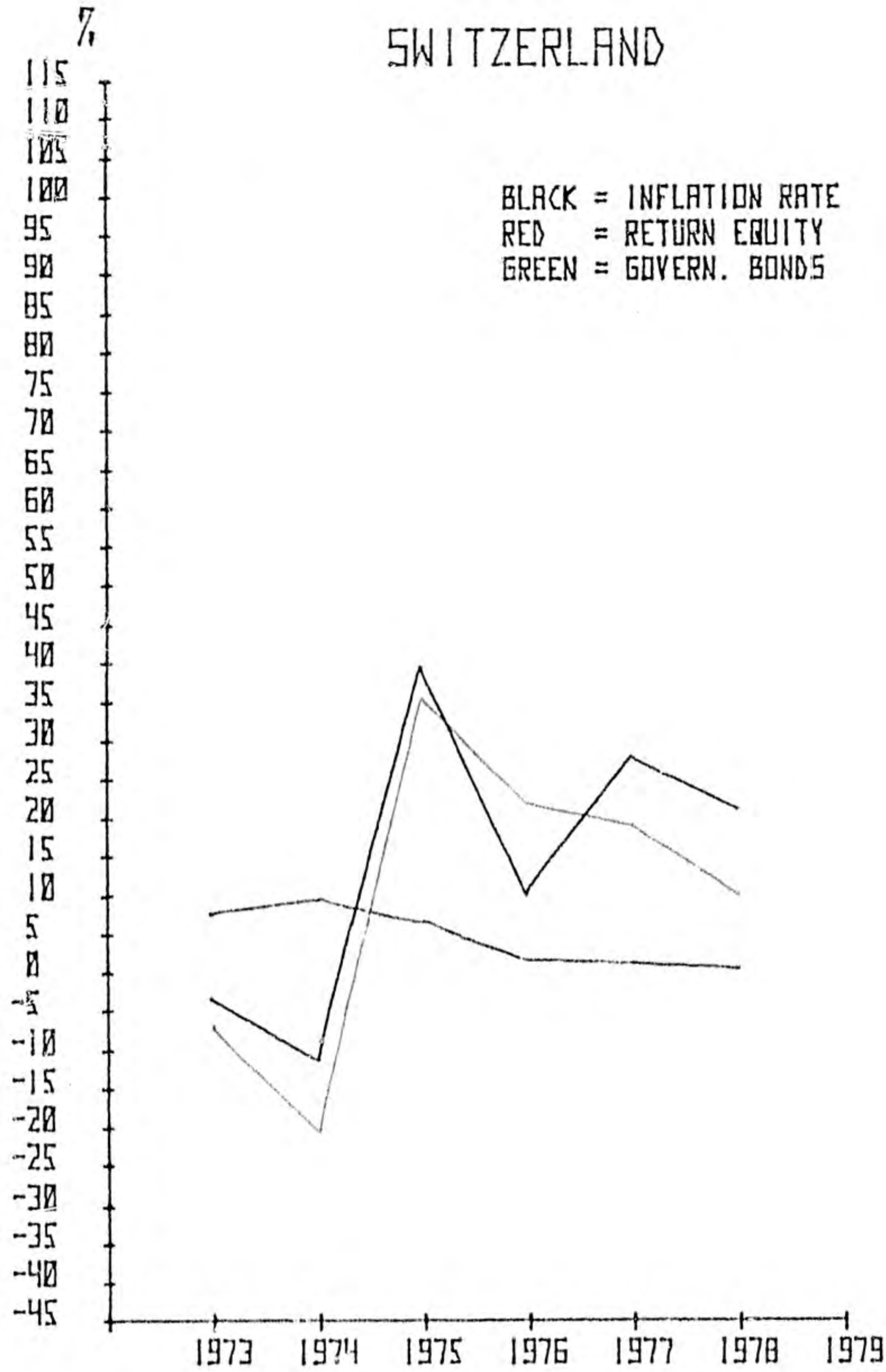
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Permanent Fund requires some independence from the executive. On balance, the provisions in HB-300 seem appropriate given the stipulation of confirmation by the legislature, and removal only "for cause".

Given the small size of the policy board, the requirement of a two-thirds quorum is particularly important to ensure an active and vital policy group in which a substantial number of the members are consistently present.

I would suggest that you consider some mix of users among the seven public members of the policy board. One user might be a representative of a municipality, another might be a representative of a regional or local development corporation, another might represent a major primary sector of industrial activity, and one might represent a distributory sector, especially in the community or regional development area. The financial community is appropriately represented on the investment committee, but users might well be similarly represented on the policy board.

I also suggest that you reconsider the soundness of having the president serve as the chairman of the policy board. The president has sufficient power as the chief executive officer. It is more common development banking practice for the chairman to be a widely-respected public member, either appointed from among the public members to serve as chairman at the pleasure of

the governor or to be chosen by the policy board itself. Having the chairman serve at the pleasure of the governor, drawn from the public members, is one method for helping to integrate the Permanent Fund's planning into state development planning. In any event, for the protection of both the president and the institution, I suggest a separation of the chairman's and the president's functions.

Also, in my judgment, all meetings of the policy board should be public, particularly in light of the fact that the policy board does not itself make specific investment decisions. Only the personnel actions of the policy board with regard to the president should be held in executive session, and then publicly announced.

The provision in HB-300 to pay policy board members $250 per meeting day, as well as per diem and travel expenses, is a good one. The policy board function is enormously important, in which the members carry great responsibility. It is common practice to pay private board members a fee for performing that function; the same should be true of a public development bank such as the Alaskan Permanent Fund.

The Duties of the Policy Board (Section 60) are well drawn. The distinction between your policy board and investment committee is remarkably similar to the distinction between the policy

board of the Massachusetts Industrial Development Authority and its subsidiary investment review boards.

It may be wise to point out in precise language that the policy board cannot impose an investment decision upon, or override an investment decision of, the investment committee. It can only determine, on a periodic post-audit basis, that investment decisions made by the investment committee were within the overall annual operating and financial plan approved by the policy board.

The Structure and Duties of the Permanent Fund Investment Committee (Sections 70 and 80) are also quite sound. Here I think it is not only appropriate but essential that the president of the Permanent Fund serve as chairman of the investment committee. I would suggest, however, that at least one of the members of the Permanent Fund investment committee have "recogized competence and wide experience in" community economic development.

The Structure and Duties of the Permanent Fund President (Section 90) are also generally well articulated, although there are a few matters here which call for some clarification. For example, I wonder if I am the only one confused by the apparent contradiction between a Permanent Fund president to serve for "a term of five years," while at the same time serving "at the pleasure of the policy board." In my judgment, the Permanent

Fund can only be effective if in fa[illegible] the president is subject to employment at the "pleasure of the policy board."

Similarly, the provision in Section 170 which states that "members of the policy board are prohibited from all attempts to influence the investment committee, president, officers and staff in the discharge of their ordinary operating duties. The president, officers and staff of the Permanent Fund, in the discharge of their offices, owe their duty entirely to the Permanent Fund and no other authority," seems to me to confuse the respective responsibilities of the policy board, investment committee and president, rather than clarify them.

Finally, I am pleased that this generally good draft recognizes the importance of empowering the president of the Permanent Fund with the sole responsibility for "the organization, appointment, dismissal, and remuneration" of all other staff. The policy board wants to be able to hire and fire a president who is then held wholly accountable for all of the other operations of the Permanent Fund.

<u>The Provisions for Technical Assistance</u> in Section 160 are another area in which I would suggest some reconsideration by the Permanent Fund committee. This provision, however well intended, runs counter to my own experience in designing development banks. In fact, in all recent development bank legislation I have

drafted, we have specifically prohibited the development bank from "providing financing for pre-investment activities including feasibility studies." The reasoning behind this prohibition is simple: we want to hold separate the developer function from the banker function. If the development bank invests in its own pre-investment feasibility studies or technical assistance there is a tendency on the part of the development banker to become prematurely "married" to what may turn out to be an unsound idea.

On the other hand, this kind of technical assistance is essential--particularly for many regional and local community development projects. Therefore an alternative solution has been to create a separate technical assistance agency which is specifically in the business of using "soft" tax dollars rather than "hard" investment dollars to make these pre-investment studies and then to bring the developed proposal to the development bank for an arm's-length banker review. Section 160 deserves further thought and review in light of this experience.

Intervention in the Case of Default: The apparent contradictions between Section 130 (2) (3) and Section 130 (b) need to be resolved so the management of the Permanent Fund has full power to protect its investments, including the exercise of voting rights.

D. What Capital Structure is Necessary to Ensure that the Alaskan Permanent Fund Has the Financial Capability to Achieve These Purposes?

The capital structure of a development bank is intimately tied to the goals of the institution. Different kinds of management and different kinds of capital are both required in order to carry out the different purposes. Both international and domestic development finance experience makes it emphatically clear that for the very reason we don't want venture capitalists to make unsecured inventory loans and for the very reason we don't ask commercial bankers to make thirty-year, fixed-asset land, plant and equipment loans, we need to keep the risks, managements, and funds of the development bank separate to carry out separate tasks. Thus, the World Bank Group, for instance, separates the International Finance Corporation (an equity investing vehicle) from the World Bank itself (a market-rate debt vehicle) from the International Development Authority (a subsidized, below-market granting and lending vehicle). In Massachusetts, the Technology Development Corporation and the Community Development Finance Corporation, which are both high-risk equity and venture capital vehicles, are capitalized, managed, and insulated from each other and from the operations and risks of the long-term secured lenders such as the Industrial Finance Agency. In public development

finance as in private finance, the terms, the cost, and the character of the sources of funds must match the uses of the funds.

It is for this reason that I suggest that operational principle number 9 which empowers the Permanent Fund to "make investments in financial intermediaries . . ." might be more precisely defined to isolate several compatible but operationally distinct tasks on a functional basis. Specifically, I suggest that the business plan of the Permanent Fund consider the possibility of establishing separate subsidiary financial intermediaries to carry out several possible specific functions of the Permanent Fund, including:

a technology development corporation to invest in technologies which would reduce the cost of value-added and refined production of both renewable and nonrenewable resources in Alaska;

an intermediate and long-term financing agency to collaborate with commercial banks and savings banks in providing debt and debt guarantees in support of greater intermediate and long-term capital for medium and small-sized enterprise;

a community development finance corporation to co-venture with regional and local community development corporations and municipalities in providing equity as well as debt and debt guarantees to finance income-producing community

development projects particularly in lower-income and rural areas of Alaska; and

a central development bank for locally-owned cooperative banks which would be initially capitalized by the Permanent Fund but eventually repurchased by local cooperatively-owned user banks in order to support rural and community development in outlying areas of Alaska.

Each one of these four areas of activity would have its own investment review board appointed by the policy board (much like the investment committee) with persons of "recognized competence and wide experience" in the specific investment area. Their chief executive officers would be directly appointed and directly responsible to the president of the Permanent Fund, but the day to day decision-making would be the province of the investment review board and the staff of the subsidiary institutions. The policy board, the investment committee, and the president would retain the same direct power over these subsidiaries that any private corporation holds over its subsidiaries. As the Central Bank gradually became owned by its users, this authority in time would pass from the Permanent Fund to the users.

Two major areas of activity would be directly retained by the Permanent Fund:

First, those productive private investments which are of

such a large scale and such a relatively high risk as to be beyond the capability of the private market acting alone;

Second, large-scale infrastructure investments deemed critical to the overall development of the Alaskan economy. Any subsidies necessary to finance the infrastructure, however, would be borne by the Alaskan General Fund rather than the Permanent Fund. Operational principle number 4, Section 130, implicitly suggests that any subsidies would be made by special appropriation of the legislature. I think that additional consideration might be given to the retention of income on investments by the Permanent Fund for a third purpose beyond overhead and reserves--that purpose being the explicit provision of subsidies for specific kinds of social overhead capital investment, community development, and infrastructure development. A specific prior authorization by the legislature should be required before the income of the Permanent Fund could be released to those purposes by the policy board.

Section 130 (8) could also be used to create subsidiary financial intermediaries on a geographic basis to encourage some more sensitivity to the needs of lesser-developed regions in Alaska. In our highly complex political economy, it is not necessary that capital mobilization and decision-making take place at the same level. This has been amply demonstrated in the

operations of the Federal Home Loan Bank System and the Farm Credit System at the federal level. Similarly, there are increasing numbers of development finance intermediaries at the state and local level which operate on a decentralized basis so that decision-making is more sensitive to local conditions. Local investment decision-makers will be better able to assess the risk, service the risk, monitor the risk, and deal with problems of default than a more distant investor. International, national and private market financial experience supports this concept.

Finally, my limited exposure through memoranda to the existing thirteen revolving loan funds now operated by the Alaskan state government suggests that they might be more efficiently managed as subsidiary development finance intermediaries under the overall policy guidance of the Permanent Fund. This is another matter that calls for further review.

The Provision for Reserves in Section 120 is a good start which does not go far enough. The legislature should consider establishing specific differential reserves for different kinds of equity, debt or debt guarantee activity. For instance, reserves for community development equity investments by the Massachusetts Community Development Finance Corporation are projected to be 100 percent. Similarly, no state has established long-term industrial debt guarantee programs without limiting the

state's exposure through a ceiling on reserves in ratio to total guarantees outstanding.

The Provision for Borrowing Powers in Section 40 is a very important provision in terms of the future growth and development of the Permanent Fund. The dedicated oil revenues initially capitalizing the Permanent Fund's equity base at $2 or $4 billion should be compared to the capital base of the World Bank or the Canada Development Corporation. If the Permanent Fund is soundly managed, the opportunity to leverage additional equity or debt in worldwide money and capital markets on top of that equity base is substantial, as has been the experience of the CDC (in equity markets) and the World Bank (in international bond markets).

MODELS AND OPTIONS
FOR THE
ALASKA PERMANENT FUND:
FUNCTIONS, REGIONALIZATION AND ACCOUNTABILITY

Report Number Two

September 14, 1977

Belden Hull Daniels
Department of City and Regional Planning
Harvard University

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MODELS AND OPTIONS FOR THE ALASKA PERMANENT FUND: FUNCTIONS, REGIONALIZATION AND ACCOUNTABILITY

September 14, 1977

INTRODUCTION: Some Models and Options

My first report of July 11, 1977 raised many questions concerning the purposes, functions, sources and uses of funds, management and accountability of the proposed Alaska Permanent Fund, based on the accumulated experience of several hundred development banks over the last one hundred years.

This second report takes the next step, and provides a beginning look at a number of development banks whose experience and functions seem particularly relevant to potential public purposes of the Permanent Fund. In selecting development banks to analyze in detail, I have been guided by two factors: first, institutions which would compliment reports already prepared for the State Investment Advisory Committee by Price Waterhouse and White, Weld; second, institutions whose purposes and functions seem particularly relevant to key potential Fund goals.

Each of these institutions have been analyzed and compared in terms of: I. Purposes; II. Sources of Funds/Capitalization; III. Uses of Funds/Operations; IV. Management; V. Accountability; VI. Evaluation; and VII. Relevance to the Alaska Permanent Fund.

In addition to this look at functional models for the Fund, two key structural issues are outlined in some detail, based on domestic and international experience: regionalization; and accountability to the taxpayers, legislature, and executive. In both instances, a conceptual approach is developed out of a range of

domestic and international experiences. This experience and the conceptual framework will probably raise more questions for your further consideration.

Again I would like to note that as an outsider, I feel competent to suggest detailed operating experience which may be relevant to the Permanent Fund's purposes, but not competent to suggest what those purposes should be. There is an old Asian proverb which says that after one trip to India foreigners write a book, after two they talk in quiet whispers, after three, they say nothing at all. This is my second trip to Alaska.

It is with special gratitude that I thank my research associate, Mitchell Rosenberg, for his extraordinary care in helping to prepare this report. One of the pleasures of teaching and working is witnessing younger colleagues and friends grow in competence to encompass their vision. I wish Mitchell well in his year in Germany.

My sense is that this second report, like the first, will raise more questions than it answers. For this reason, I have noted it a "discussion draft", and look forward to responding to the further issues it raises.

I. FUNCTIONS

A. ALASKA OWNERSHIP OF LARGE SCALE ALASKA ENTERPRISE

I. PURPOSES

The CDC is an investment bank operating in the private sector of the Canadian economy. Created in 1971 by an act of Parliament, its initial capitalization was provided by the Canadian treasury in the form of a purchase of over $250 million in common stock. Such an institution had been proposed by government officials as early as 1958 in response to concern over the high level of foreign ownership and control of Canadian business. This condition, they felt, discouraged the development of native entrepreneurial talent necessary for economic growth and job creation. The proposed use of financial mechanisms to achieve such goals met with strong opposition from the Canadian business sector and allied politicians. When the CDC bill was passed after 15 years of debate, none of these social objectives were included in the institution's statutory agenda.

Legislative Goals

The three main objectives of the CDC summarized in the act are:

1) to help develop and maintain strong, Canadian-controlled and managed corporations in the private sector of the economy;

2) to widen the investment opportunities open to Canadians; and

3) to operate profitably, in the best interests of all its shareholders, public and private.

The investment policies by which these goals are to be achieved were left purposefully broad in the act in order to accommodate conflicting views of the proper role for the institution in passing the legislation and to provide maximum managerial discretion. This is similar in concept and language to the draft of the Permanent Fund developed by the Investment Advisory Committee. However, the "Objects" section of the act, various documents of the debate prior to its passage, and statements of company officials provide a clear picture of the CDC's investment criteria and their rationale.

Management Interpretation of Goals

CDC management interprets its role as a provider of the equity capital necessary to mobilize Canada's material, human and capital resources to bring domestic industry up to internationally competitive scale in the long run. The management's investment policies following from this view are:

1) emphasis on large, longer-range development projects, particularly those involving upgrading of resources, a high technological base or good potential for building a Canadian-controlled presence in international markets.

2) Profit potentials must be commensurate with perceived risk. This is the one criterion mandated in the act, similar to the current draft of the Permanent Fund. As a rule of thumb, the Board proposed targeting investment to sectors in which predicted growth exceed twice that of GNP. Acknowledging the long-term nature of their mode of investment, the directors declare, "CDC is prepared to be patient, recognizing that some of its opportunities will exist because others are unwilling or unable to wait through the years of earnings buildup."

3) CDC in a manner again similar to the current Permanent Fund draft, does not seek to duplicate or preempt activities in the private capital market. Thus it does not lend, debt capital presumably being readily available to large-scale enterprises in the Canadian private market. It is, however, prepared to play a catalytic role in joint ventures with foreign or domestic investors.

4) CDC seeks controlling positions, through the purchase of voting stock, in the companies in which it invests--this in order "to take measures necessary to protect and increase the value of its holdings." Such measures connote input into top-level strategic and corporate planning decisions, not day-to-day management. The Permanent Fund draft is unclear on this point.

5) CDC seeks to concentrate its activities in sectors where Canada holds competitive advantage on an international

scale or can achieve such position through consolidation of markets.

6) Roles the CDC specifically rejects include buyer-of-last-resort for faltering firms, buy-back agency for foreign-controlled firms or high bidder in take-over contests where foreign firms are involved.

In order to pursue these policies, CDC has been granted a very broad range of powers. It may invest in any asset or security, promote companies, lend or guarantee funds. It may even invest in firms not carrying on any part of their business in Canada when, in the opinion of the Board of Directors, such investment would further the aims of the company.

II. SOURCES OF FUNDS/CAPITALIZATION

Authorized - CDC is authorized to issue 200 million common shares without nominal or par value, of which the first 30 million were subscribed by the Canadian government from 1971 to 1975 at prices averaging slightly over $10 a share. The company is further authorized to issue up to $1 billion in preferred stock with such convertibility, voting and interest features as the Board determines. CDC is under no statutory debt limit. Management has chosen a target level of 40 percent of paid-in capital, a conservative policy designed to compliment CDC's risk-oriented

investment policies. This scheme indicates a potential capitalization of $5 billion.

Capitalization Goals

CDC wishes to finance further investment through the public issue of shares. Its aims in so doing are:

1) to decrease the government share of ownership to 10 percent within 10 years. The government currently holds 65 percent of all CDC stock outstanding.

2) to offer opportunities for equity investment in Canadian industries to Canadian investors. Political support is an expected by-product of such a policy.

Reliance on public support reinforces the profit criteria for investment, since continued growth will depend on investors' perception of CDC as a safe and profitable investment.

Actual History of Capitalization

1971 - CDC was originally capitalized by the Cana ian government's purchase of 25 million shares for a price of slightly more than $250 million. The government increased its holding incrementally over the subsequent four years until it held about 30 million shares valued at slightly more than $300 million in 1975.

1974 - CDC placed 10 million non-voting redeemable preferred

shares with institutional investors. These preferred shares sold for $10 and carried a dividend of 5 3/4 percent. The proceeds of this issue were used, in part, to pay off bank debt incurred to finance start-up operating costs. The shares are redeemable at the option of the holder or CDC after five years.

1975 - CDC marketed 1.5 million preferred voting shares to some 20,000 individual, institutional and governmental investors. These shares sold for $100 and carried an 8 percent dividend. They were convertible for 10 shares of common stock with further share bonuses for early conversion. They are redeemable at the option of the holder or CDC after five years. This was the largest public stock offering in Canadian capital market history.

Despite CDC's profit orientation, its performance has not yet inspired sufficient investor confidence to support the subscription of common stock on the basis of capital gains alone.

In 1975 CDC also issued about 950,000 shares of common stock to the Canadian government as the final $10 million payment for the Crown Corporation, Polysar.

Outstanding debt of wholly-owned subsidiaries stood at $250 million at the end of 1975.

III. USES OF FUNDS/INVESTMENT OPERATIONS

CDC has used its funds primarily to invest in established

businesses either through buying the enterprise outright or through purchase of a significant portion of its outstanding securities. CDC's holdings in 1975, by industrial sector, were as follows:

Petrochemicals - CDC acquired Polysar Ltd., a manufacturer of rubber and petrochemical products, from the Canadian government. The negotiated price for the Crown corporation was $62 million plus $10 million if certain profit targets were met. As of year-end 1975, Polysar's assets were $602 million. In 1975, CDC, through Polysar, joint-ventured with Canadian banks to finance the construction of the Petrosar naphtha cracking plant, a $575 million, world-scale facility.

Mining - In 1973, CDC acquired, through tender, 30.2 percent of the stock of Texasgulf, Inc., the American-based energy and mining firm. At the time of this acquisition, 68 percent of Texasgulf's earnings were generated by enterprises located in Canada.

Oil and Gas - In 1975, CDC acquired 60 percent of the Canadian assets of Tenneco. These assets include gas and oil processing plants and vast areas of oil, gas and bituminous tar producing properties. These assets are valued at $135.0 million.

Health Care - CDC has purchased several drug companies and research facilities in an effort to build a consolidated Canadian-

owned complex in the health care field. The flagship firm of Connlab Holdings Ltd. is Connaught Laboratories, a research facility formerly attached to the University of Toronto. Since the consolidation of these companies in 1974, Connlab has shown steady losses.

Venture Capital - CDC's directors have acknowledged the crutical role of financial support for technological innovation in economic development. They have not found it appropriate, however, to undertake the complex and time consuming services of venture capitalists themselves. Instead, CDC has purchased large amounts of stock in three existing venture capital firms, leaving their management free to administer the newly expanded funds. These firms invest in a wide variety of enterprises at the conceptual or early development phase.

Pipelines - CDC has advanced $3.8 million to a consortium planning the construction of a North-South natural gas pipeline.

Looking over CDC's investments, it is apparent that they meet the institution's criteria of being in sectors where Canada holds a comparative advantage (natural resource extraction and processing) or which have experienced high growth (medical supplies and equipment). Unfortunately, statistics which would permit an estimate of CDC subsidiaries' presence in their respective sectors are not available. We can, however, get some idea of the

impact of these investments on the extent of Canadian control of these sectors by comparing 1968 statistics on total assets, Canadian and foreign held, in major sectors which appear in a 1973 government report on foreign investment in Canada to CDC's current holdings.

In 1968, assets employed in the petroleum/natural gas sector totaled $9.2 billion, of which Canadians held $3.7 billion (38 percent). Even given growth in this sector between 1968 and 1973, CDC's Petrosar undertaking is a sizable net addition to Canadian holdings in this sector. None of CDC's other undertakings have nearly so large a quantitative impact.

IV. MANAGEMENT

The Corporation is managed by a Board of 21 Directors drawn mostly from the business community. While the government holds over 50 percent of the stock, two Deputy Ministers are ex officio Board members with no voting power. The government may choose to appoint four Directors rather than casting its ballots at Shareholders' Meetings. Such power has not been exercised to date. The government has stated both publicly and privately that it does not intend to interfere with the affairs and management of the Corporation.

The Board's policies are administered by a highly profes-

sional central staff of twenty. Subsidiaries' production decisions are to be made independent of CDC input. The staff was kept small to encourage flexible response to problems. Specialized matters are often referred to consultants.

V. ACCOUNTABILITY

The CDC act, elements of Canadian corporate law and the political climate in which the Corporation was implemented combine to leave the CDC Board and staff in virtual total control of company operations and investment.

Legislative Accountability

By statute, CDC is not subject to Parliamentary oversight. Parliament's latitude for intervention is restricted to voting changes in capital authorization and certain exceptional by-laws concerning CDC's objectives. Given the Corporation's immense initial capitalization, it is unlikely that Parliament will have the opportunity to exercise any constraints on CDC short of closing it down.

CDC is not a Crown Corporation, i.e., a public corporation formed under the Canadian Financial Administration Act "that is ultimately accountable, through a Minister, to Parliament for the conduct of its affairs." Although it is publicly capitalized, it

is subject to no ministerial oversight or control. Rules governing disclosure for Canadian corporations have been widely attacked for being unduly lax; these are the accountability standards to which CDC is being held.

Executive Accountability

The federal government does hold a certain amount of de facto power through rules governing the distribution of shares. No association, a term defined operationally by the Board, may hold more than 3 percent of the outstanding voting stock. The federal government may hold 10 percent. Therefore, its voting position may always be dominant, given an absence of block coalitions. However, the government has chosen to maintain a hands-off stance towards CDC operations. Investment policies and priorities, for example, were set by the Board with no government input. With its current holdings, the government could exercise control through the removal of Board members, but has chosen not to do so.

The government has eschewed other control mechanisms which have been applied to mixed enterprises in Europe, where this kind of structure has a longer history. These mechanisms include having government officials as voting members of the Board of Directors, actively exercising voting shares, statutory regulation of investment operations and maintaining a permanent or intermittent

public body to audit the activities and reports of the public financial institution. The CDC act provides for none of these supervisory measures. According to most observers, such lack of government input and control eliminates CDC from use as a tool in any centrally planned economic development effort.

VI. EVALUATION

Recalling the three purposes of the institution (p. 3), how has CDC performed? Before attempting an answer, we must recognize that evidence is limited to skimpy annual reports covering only four years of operating experience.

Regarding the creation and maintenance of strong, Canadian-controlled industries, CDC has followed a policy of expansion and consolidation of existing firms. CDC's equity presence in Polysar allowed the company to incur debt to finance capital expansion at a much quicker rate than was realized under government ownership. In assembling Connlab Holdings, CDC seems to be creating a vertically-integrated drug complex covering research, production and distribution. What these policies will mean in terms of rationalization, investment and employment remains to be seen.

CDC has increased investment opportunities open to Canadians only marginally. Its one public stock issue was in the fairly large denomination of $100/share and was apparently bought in

blocks averaging 75 shares. Clearly, this kind of marketing will not broaden participation in equity ownership. Quantitatively, however, this was a very big issue. During the decade previous to the issue, gross new issues of Canadian preferred stock averaged only $132 million, compared to the $150 million sold in one shot by CDC.

CDC has shown some profit in terms of earnings per share every year.

CANADA DEVELOPMENT CORPORATION

Year	Capitalization[1]	Value of Holdings[2]	Earnings/Share
1975	708	857	$0.31
1974	548	549	$0.81
1973	344	465	$1.89
1972	138	200	$0.57

[1]Capitalization = Capital stock plus retained earnings, in $000's.

[2]Value of Holdings = Investments plus fixed assets of wholly-owned subsidiaries, in $000's.

Given the $10+ price of shares, earnings have been modest. They have fluctuated with the general conditions of the Canadian economy and have been well below the CDC Board's stated profit target of 15 percent.

CONSOLIDATED BALANCE SHEET
December 31, 1975
Canada Development Corporation

	1975	1974
ASSETS	(thousands of dollars)	
Current Assets	$ 378,430	$ 321,811
Investments	354,581	332,354
Fixed Assets of Subsidiaries	502,792	216,271
Other Assets	41,73	29,155
TOTAL	$1,277,537	$899,591
LIABILITIES		
Current Liabilities		
Short-term loans	$ 95,198	$ 97,484
Accounts payable and accrued liabilities	95,674	74,752
Dividends payable	4,280	1,437
Income and other taxes payable	15,222	3,575
Long-term debt due within one year	10,416	15,672
Total	220,790	192,920
Long-Term Debt	250,358	137,439
Deferred Income Taxes	25,337	9,744
Interest of Minority Shareholders in Subsidiaries	73,218	11,172
Total	569,703	351,275
SHAREHOLDERS' EQUITY		
Capital Stock	564,563	422,000
Retained Earnings	91,699	74,744
Excess of Book Value over Cost at Date of Acquisition of Subsidiary	51,572	51,572
Total	707,834	548,316
TOTAL	$1,277,537	$899,591

VII. RELEVANCE TO THE ALASKA PERMANENT FUND

In analyzing the relevance of the Canada Development Corporation to the Alaska Permanent Fund we will review the major headings in this memorandum in order: Purposes, Sources and Uses of Funds, Management, and Accountability.

Purposes: The purposes of the Canada Development Corporation appropriate for consideration by the Permanent Fund are:

1) to encourage the establishment and maintenance of strong Canadian controlled enterprises;

2) to widen investment opportunities for Canadian investors; and

3) to operate for a profit.

The achievement of the first two goals is conditioned by and dependent on the third. Profit is the operational goal most frequently and explicitly mentioned by management in its official reports. They attempt to make a case for their pursuit of profit by claiming that the partially public benefits of the first two goals will never be realized unless a rate of profit and growth higher than that enjoyed by foreign controlled elements of the Canadian economy are achieved. In the first annual report, management stated,

> If we as a nation are to increase the Canadian content of our economy, it must be essentially by encouraging the sound growth of Canadian-controlled enterprises at a pace which exceeds that of their non-resident-owned competitors.

In the case of altering the balance of Canadian/Foreign control of Canadian industry, the statement above amounts to a tautology. In terms of providing wider investment opportunities in Canadian enterprise to Canadians, the statement is true to the extent that CDC issues must out-perform competitive securities in order to be attractive to investors. Canadian investors have access to international capital markets, and, in 1970, 40% of the securities held by institutions and individuals in Canada were of foreign issue.

The achievement of extraordinary profits by an investment holding company like CDC is unlikely. Recent work in investment portfolio theory and the experience of the securities industry in the past decade have demonstrated the futility of attempting to "out-perform" the market in the long run.

CDC may even be compounding its difficulties by investing in as few enterprises as it does. This investment strategy may lead, and in CDC's case has led, to unstable earnings and cash flow. Such a situation may inhibit the planning of future operations.

CDC's investment operations raise issues of control over the exploitation of natural resources, operations of the Canadian capital market and ownership structure of major industries, all of which are legitimate concerns of the Federal government and the Canadian people. The proponents of CDC in its present form

convinced Parliament that it was necessary to give up control over these matters in order to achieve the more limited goals in the statute. However, what the government got for relinquishing such controls is of questionable value. Lack of government input into CDC operations is the major weakness of the institution.

Sources and Uses of Funds: The management of the Canada Development Corporation has intentionally developed a strong equity base with only 40 percent debt in order to undertake the kinds of long-range, high-risk strong ownership positions which are essential to carry out its purposes.

On the other hand, the Canada Development Corporation must maintain a very strong return on its invested capital in order to attract the substantial private investment in the Canada Development Corporation which it is seeking. The Permanent Fund will not have such a constraint, which has both negative and positive aspects. From a positive standpoint, it will not be forced to get such a market return; from a negative standpoint, it will not have the correction of the marketplace monitoring its investments quite so carefully.

Management: The Canada Development Corporation has the kind of strong, independent, professional staff necessary to any successful development bank. The Canada Development Corporation follows the wise course of only overseeing the major strategic

planning decisions of its subsidiaries and affiliates, and not involving itself in day to day decision making.

Also, the Canada Development Corporation management has been given the very broad managerial discretion to make investment decisions which is contemplated in the current draft of the Permanent Fund.

Accountability: On the other hand, the Canada Development Corporation is a preeminent example of a development bank which does not have sufficient accountability to either the executive or the legislature.

INTRODUCTION

The National Enterprise Board, established under the Industry Act of 1975, is a public financial and promotional institution whose principal objectives are to assist the economy of the U.K., to promote industrial efficiency and international competitiveness and to expand opportunities for productive employment.

From 1968 to 1971, the British government operated a public financial institution with a similar purpose--the Industrial Reorganization Corporation (IRC). IRC's functions were limited to promoting and providing finance for mergers which the directors felt would help effect the rationalization of an industry. (Many of Britain's manufacturing sectors are characterized by firms too small to compete on an international scale.) IRC generated a great deal of opposition from private financial interests which felt that they were being subjected to unfair competition. The institution was disbanded by the newly elected Tory government in 1971. NEB, which incorporates the functions of IRC into the comprehensive program described below, began operations in November 1975.

I. PURPOSES

In order to meet these broad objectives the NEB carries out several different functions. Some observers feel these functions

are not consistent with each other. In planning its investments, the Board is to apply standard commercial criteria of profitability. On the other hand, it is viewed by government and its own directors as an instrument of national industrial policy and is therefore responsible for meeting various public policy criteria in its operations. The implications of NEB's mixed agenda will be examined in the detailed enumeration of the institution's purposes below.

NEB's operations fall into four conceptually separable classifications:

a) Finance for Industrial Investment - NEB acts essentially as an investment banker, purchasing the equities of private firms where it feels the investment will show a reasonable return, will help effect the purposes of the Act and will not displace private investment. NEB also makes loans on commercial terms.

b) Industrial Holding Company - NEB is responsible for the strategic management and financial monitoring of several large nationalized firms.

c) Assistance to Companies in Financial Difficulty - NEB administers capital assistance to firms in temporary financial difficulties. Funds for this activity are provided by the Secretary of State for Industry who is also responsible for deciding which firms will be considered for such assistance.

d) Promotional Acitvity--NEB offers assistance in procuring foreign contracts for British firms or groups of firms and in coordinating the activity of regional development authorities.

Each of these four purposes is analyzed below.

a. Finance For Industrial Investment

NEB's main function is the provision of finance for industrial investment, particularly for the expansion and modernization of productive facilities in manufacturing. In addition, finance or advisory services may be provided to promote industrial restructuring. Finance is normally provided in the form of equity, but loans at commercial rates of interest may also be provided.

NEB's investment policies are shaped by an interim statement of guidance from the Secretary of State for Industry, which is now pending statutory enactment. Except for those investments made at the direction of the Secretary* (see Section c), profitability, defined as the projected discounted rate of return to capital, is to be the main investment criterion. Subsidiary to this are certain public policy considerations, including:

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*Note: In this profile, "Secretary" denotes the office of the Secretary of State for Industry.

i. preparing for growth by action to increase longer-term capacity in key sectors of manufacturing industry;

ii. increasing exports or savings imports; and

iii. where there is a choice of location, creating new jobs in areas of high unemployment.

NEB devoted considerable time to identifying sectors where its assistance would be most beneficial in terms of promoting efficiency. They incorporated data and analysis from the White Paper accompanying the Industry Act and a 39-sector industry study by the National Economic Development Councils into their annual investment plans. NEB intends to use these studies and other analysis provided by the Secretary to guide future investment policy.

b. Industrial Holding Company

The NEB acts as a holding company for a number of shareholdings previously held directly by the government. The portfolio will be added to from time to time as a consequence of the NEB's role as a provider to new equity finance and through the purchase of existing shares in companies. In addition, the NEB has power under the Act to set up new enterprises or to participate in joint ventures with the private sector.

The basic job of the NEB as shareholder is to ensure a proper

return is secured to the taxpayers who provide capital through the Consolidated Fund, the general tax revenues of the British government. In so doing, the Board does not intend to participate in day to day management. Their oversight consists in most cases of making arrangements for the provision of regular monthly information to the NEB on performance and financial prospects, for the provision of annual and long-range plans for the approval by the NEB and for the submission (in the case of subsidiaries--wholly-owned companies) of major capital investment proposals, acquisitions and disposals for approval.

Many of the "transferred companies'" problems have arisen from unstable industrial relations resulting from the inability of management and labor to work out satisfactory wage and productivity provisions. There are three high union officials on the NEB's ten-member Board of Directors. Their presence may be interpreted as a move to force some rapprochement between labor and management, given the Board's responsibility for strategic management and oversight of the troubled enterprise.

c. <u>Assistance to Companies in Financial Difficulty</u>

The NEB may be directed by the Secretary to assist a company in financial difficulties which needs to be restored to a sound state for reasons of employment or industrial policy. In some

cases, the Board will consider the provision of funds in some combination of commercial and subsidized terms. In such cases, the NEB will be reimbursed specifically for their involvement; and to ensure that their financial discipline is not undermined, these activities will be accounted for separately.

d. Promotional Activities

Foreign Contracts - In keeping with its policy to expand exports, the NEB attempts to use its central organizing and financial capabilities to help British industries compete for large foreign contracts. According to the Directors' analysis, "Overseas contracts are becoming so large in value, and the conditions attached to them so onerous, that many UK companies do not have a big enough asset base to undertake the risks; in addition there is a tendency among developing countries to favour tenderers with some form of government backing." NEB has announced that it is willing to joint venture with firms or groups of firms competing for such contracts. In 1976, it assisted in two such projects. The contracts were, however, awarded to other bidders.

Regional Activities - The Secretary's interim policy statement directed NEB to give particular weight to creating jobs in areas of high unemployment. In accordance with this direction, NEB has set up officies in Liverpoool and Newcastle. The Regional

Directors' initial task has been to establish their offices, to build up close relations with public and other bodies concerned with regional development and industrial investment in their regions, and to seek out companies with potential which might require finance from the NEB to fulfill their modernization and expansion plans.

II. SOURCES OF FUNDS/CAPITALIZATION

NEB's investments are financed wholly by the national government. NEB may draw on two sources within the government: the National Loans Fund, and "public dividend capital" appropriated annually by Parliament to the Secretary of State by the Treasury for use in industrial investment. The National Loans Fund is a revolving fund to be used to make loans to private firms. The amount of money in the fund and the annual volume of loan activity is set by Parliament; it is administered by the Secretary. NEB may borrow from the Fund at private commercial rates and lend this money to the firms in which it invests. NEB must repay these loans on a fixed schedule set in advance in consultation with the Secretary. NEB may charge a small interest ra e differential to its borrowers to cover its costs in originating and monitoring the loan.

Public dividend capital is another pool of investment funds

made available to the Secretary by Parliament, with controls similar to those exercised over the National Loans Fund. Repayment of these advances are flexible. Dividends and recovery of capital are set by the Secretary in consultation with NEB on a yearly basis. In 1976, NEB paid no dividends on the public dividend capital it received and subsequently invested in the firms it financed. Returns on public dividend capital are to be paid into the Consolidated Fund.

The Secretary and the Treasury must approve all advances from both the National Loans Fund and public dividend capital. The Board must supply accounts of the application of these funds to both offices.

The Treasury may authorize the use of general tax revenues to guarantee repayment of loans undertaken by NEB. The Treasury must notify Parliament of all such guarantees.

As of December 31, 1976, the breakdown of funds received by NEB was:

Public Dividend Capital

Debt assumed from the government upon transfer of investments; Directed by Secretary of State to be treated as public dividend capital:	Subsidiaries	418.4
	Associates	6.2
	Others	1.2
		425.8
Issued to NEB during 1976		54.0
Total		479.8

Loans

Capital debt assumed from transferred companies:	77.8
New loans issued to NEB during 1976	21.3
Total	99.1

(All figures in £ million.)

Since NEB does not market securities, debt/equity ratios are not material to its success in obtaining further funds for investment. More important will be its return on capital and the performance of its subsidiaries. These factors will figure prominently in the Secretary's decision to continue providing investment funds to NEB.

III. USES OF FUNDS/INVESTMENT OPERATIONS

NEB's assets consist largely of investments and loans to five large public corporations transferred to it by the government. All of these companies have suffered financial, managerial and labor problems in the last few years. They have been only marginally profitable or have shown losses. The book value of these companies' assets was £624.1 million at the time of transfer. Their negotiated price, discounted for their market problems and used for calculating returns to NEB, was £495.7 million. During 1976, NEB made £40.41 million in new equity investments and £20.13 million in loans to these companies.

The operating status of NEB's major industrial holdings as of the date of transfer from the government was as follows:

British Leyland Ltd.

	12 months to Sept. 1975	15 months to Dec. 1976
Sales	Ł1,868 mill.	Ł2,692 mill.
Profit (Loss), Before Tax	(76.1)	70.5
U.K. Employment	191,000	183,000

British Leyland is a major manufacturer of motor vehicles and allied products. The companies comprising this conglomerate had shown steady losses during the Sixties. They were consolidated and nationalized in 1973. British Leyland's small profit in 1976 is attributed to higher export margins resulting from the decline of the pound. The firm's major problem is that it has been unable to produce enough vehicles to meet demand. This is due mainly to disrupted labor relations. During the 15 months ended December 1976, 7.1 million man-hours were lost due to strikes and subsequent layoffs.

Data Recording Instrument Co. Ltd.

	12 months to Sept. 1975	15 months to Dec. 1976
Sales	Ł10.15 mill.	Ł8.50 mill.
(Loss) Before Tax	(0.14)	(0.09)
U.K. Employment	923	1,030

Data Recording is a young firm producing computer peripheral equipment. Some 60 percent of its output is sold overseas. Its management has announced expansion plans calling for a doubling of employment in the next four years. However, the sales figures above do not seem to warrant such optimism.

Ferranti Ltd.

	12 months to Sept. 1975	15 months to Dec. 1976
Sales	£86.3 mill.	£108.5 mill.
Profit (Loss) Before Tax	(0.5)	4.1
U.K. Employment	16,651	15,576

Ferranti is a conglomerate producing many lines of heavy electrical equipment and electronic instruments. Its operations are international, with subsidiaries in Canada, Brazil and Scotland. As of the end of 1976, divisional management was being decentralized in an attempt to accelerate the increase in profitability indicated above.

Herbert Ltd.

	12 months to Sept. 1975	15 months to Dec. 1976
Sales	£49.7 mill.	£49.4 mill.
Profit (Loss) Before Tax	(13.4)	(0.7)
U.K. Employment	6,716	6,017

Herbert is one of Britain's largest machine tool manufacturers. This industry had been particularly hard hit by the recession of the early Seventies, and the firm had been forced to postpone planned equipment modernization. As of the end of 1976, domestic and foreign orders were increasing. Herbert was planning to complement upgrading of its capital with wide-reaching decentralization of divisional management responsibility and worker participation in plant-level management.

Rolls Royce Ltd.

	12 months to Sept. 1975	15 months to Dec. 1976
Sales	£602.1 mill.	£620.2 mill.
Profit (Loss) Before Tax	4.5	(21.9)
U.K. Employment	62,375	59,758

Rolls Royce Ltd. produces aircraft engines and industrial turbines. The automotive division was separated from the firm upon nationalization in 1971. Recessionary declines in demand for air travel and electricity cut severely into the derived demand for Rolls Royce's products. Declining sales leading to increased unit costs forced management to close three plants and curtail subcontracting business. Despite steady international orders for military aircraft engines, PR intends to continue cutbacks in capital expenditure and production.

During 1976, NEB also invested in new and existing smaller firms, mostly in the machine tool, computer and metalworking industries. These investments amounted to £11.51 million in equity and £21.18 million in loans.

IV. MANAGEMENT

NEB is managed by a Board of Directors consisting of two full-time and eight part-time members. The two full-time members, Chairman and Deputy Chairman, are former senior executives of industrial enterprises. Of the eight part-time members, five are business executives and three are union officials. The Board is the ultimate authority in investment decisions except in those cases reported in the "Functions" section.

The Board is assisted by a professional staff of 47, headquartered in London with regional branches in Liverpool and Newcastle.

V. ACCOUNTABILITY

Accountability to the Executive

The NEB is subject to a great deal of oversight by the Secretary of State for Industry and the Treasury. NEB must satisfy these officers that its investments are sound by commercial criteria (except in the case of investments directed by the Secretary).

NEB STATEMENT OF SOURCE AND APPLICATION OF FUNDS

for the period from 20 November 1975 to 31 December 1976

	Note		
Source of Funds			
From Her Majesty's Government			
Public dividend capital	14	53.97	
National Loans Fund	15	21.29	
			75.26
From Her Majesty's Government upon the transfer of investments and loans under Section 5 of the Industry Act 1975			
Public dividend capital	14	425.79	
Capital Debt	15	77.84	
			503.63
Application of Funds			
Overall Excess of Expenditure over Income	7		1.09
Less Depreciation			.05
			1.04
Purchase of Fixed Assets	7		.65
Purchase of investments			
Subsidiaries	9	40.41	
Associates	11	10.70	
Others	10	.81	
			51.92
Loans to			
Subsidiaries	9	20.13	
Associates	11	.76	
Others	10	.42	
			21.31
Investments transferred by Her Majesty's Government			
Subsidiaries	9	418.36	
Associates	11	6.24	
Others	10	1.19	
			425.79
Loans transferred by Her Majesty's Government			
Subsidiaries	9	74.59	
Associates	11	3.25	

It must also make an effort to fulfill a rather long list of public policy responsibilities as well. These include:

1) location of new facilities in areas of high unemployment;
2) ensuring the furthering of democratic managerial practice;
3) ensuring that the use of funds is consonant with anti-inflation policy;
4) ensuring that public corporations maintain financial discipline;
5) assisting and coordinating activities with regional planning agencies; and
6) ensuring protection of consumer interests.

Commercial standards for investment are well understood, and there exist permanent agencies within the government to monitor NEB's performance on this account. No standards or mechanisms of oversight have been brought forth by which to judge NEB's performance on the social criteria or to hold it accountable.

In setting guidelines for NEB, the Secretary acknowledged that the institution had to be left with enough discretion to respond flexibly to quickly changing investment opportunities. Thus, government oversight is to be exercised through the review of three-year investment plans submitted annually to the Secretary. The plan is to include sections dealing with:

a) existing NEB holdings (with particular attention to the activities of large companies);

b) acquisitions, joint ventures and new ventures; and

c) assistance operations;

with a discussion of the balance between these various activities.

The Secretary may enforce his decisions through two mechanisms discussed above, regulation of certain investment activities and control over the amount of investment funds available to NEB. Should the policies of the Board and the Secretary seriously diverge, these provisions could become powerful sanctions on the discretion of NEB management. At the moment, however, relationships between NEB and the government seem more collaborative than adversary.

The overall framework of the NEB's accountability to the government on matters of public policy and financial goals is given above. Here we list certain types of investment operations which require notification of or approval from the Secretary of State.

Notification of the Secretary is required when:

1) commitments exceed £10 million or the investment raises new or significant policy issues;

2) NEB acquires more than 10 percent of the voting shares of a company; and/or

3) the acquisition may require investigation under monopoly laws.

Approval is required when:

1) NEB wishes to dispose of securities;

2) commitments exceed £25 million; and/or

3) the costs of acquiring share capital exceed £10 million or confer upon NEB more than 30 percent of voting stock in a company.

Most of these restrictions on investment activity were enacted in order to assure the business community that NEB would not use its access to large amounts of government funds to compete at an advantage with private investors. NEB is subject to the same laws regarding ownership acquisition and disclosure that apply to private investors; it may not make use of privileged information such as planning agreements worked out between the government and private firms; it may not compell private owners to sell out.

Legislative Accountability

NEB is only indirectly accountable to Parliament through ministers appointed by them. Parliament also controls the amount of National Loans Funds and public dividend capital available to all recipients.

VI. EVALUATION

The most remarkable aspect of the NEB is the array of conceptually separable functions it is to fulfill and problems it is to address. After only one year of documented activity, it is impossible to assess the Board's performance. We can, however, review NEB's functions and design to make some prognosis on its chances of success. First we must review interpretations of Britain's present industrial difficulties.

Since 1960, the post-tax rate of return on physical capital to British commercial and industrial companies has fallen from 8 percent to near zero. The cause most frequently identified by commentators on this phenomenon is lack of sufficient reinvestment to maintain capacity. However, recent studies have shown that Britain's rate of reinvestment has been stable and comparable to those of other Western industrialized countries.

Recently, attention has been focused on the low productivity of labor as the major cause of unprofitable manufacturing activity. In manufacturing and utility sectors, Britain's enterprises rank consistently lowest in international comparisons of output (sales) per unit of manpower employed. This condition is particularly acute in the nationalized industries where, for example, British Leyland uses about twice as much manpower/unit as its continental counterparts producing similar cars with similar

equipment. Frequent strikes cut further into productivity of capital. For obvious political reasons, both Labour and Tory governments have been obliged to maintain employment and have thus subsidized losses in nationalized enterprises and in larger private manufacturing companies as well. Unions, therefore, face few constraints, in terms of membership job loss, in pressing for more and more costly wage and benefit settlements. Nationalized industries have also been subject to price controls in the face of continuously rising factor costs.

These are only a few of the problems facing large-scale industry in Britain; they face conditions weighing on all import-dependent industrial economies. They do, however, have the advantages of a relatively modern industrial plant and a highly trained technical and managerial elite.

What are the prospects for NEB's various roles given the simplified analysis above? Taking them one at a time:

Provision of Investment Capital: NEB's operations are a substantial improvement over previous British systems of capital assistance to private firms. Under older programs, the Treasury had to be petitioned for virtually every disbursal of investment funds, bureaucratic response tended to be slow to the point of obstructing the completion of deals. Furthermore, most assistance was in the form of loans with inflexible repayment terms.

Recipients often had to petition for further assistance to pay off their government loans.

Within rather high per investment limits, the NEB may act on its own initiative, without executive approval. Since its own source of capital for new investments is predominantly public dividend capital (76 percent of the total funds available to it in 1976), it may advance equity to the companies it invests in. Thus, NEB can absorb long gestation periods necessary for new enterprises or new operations within existing enterprises to show profits.

Holding Company: The problems facing Britain's nationalized industries are too complex, too embedded in historical patterns of class, social and economic relations for any super-managerial authority to turn around in the forseeable future. The NEB may provide one of many desperately needed forums in which labor and management representatives can be induced to address common problems.

Assistance to Financially Troubled Companies: This is NEB's least enviable and least-to-be-emulated function. To the extent that the analysis above holds true in individual cases, provision of additional capital under any terms is economically inefficient. It may, however, be politically necessary. NEB keeps separate accounts for such activities and is reimbursed for them. Thus,

the "subsidy" nature of these activities is acknowledged in NEB's records, allowing for the application of other-than-commercial standards in judging performance.

Promotional Activities: Both the foreign contract and regional development functions seem to be sensible approaches to creating markets and encouraging coordination, particularly in sectors dominated by small units. Coupled with NEB's financial powers, these could be particularly effective services for increasing Britain's international competitiveness.

VII. RELEVANCE TO THE ALASKA PERMANENT FUND

Purposes: The British National Enterprise Board, like the Canada Development Corporation is relevant to the Alaska Permanent Fund in that its central function is to finance the restructuring of ownership to ensure that assisted firms are efficiently operated under British management control.

Like the Canada Development Corporation and like the proposed draft of the Alaska Permanent Fund, the British National Enterprise Board is required to return a profit on investment that essentially meets the norms of the marketplace. On the other hand, the British National Enterprise Board statute goes one major step beyond that of the Canada Development Corporation in requiring that any subsidies are borne directly by the British General Fund and not by the National Enterprise Board. That implication exists in the current draft of the Alaska Permanent Fund but should be made more explicit.

Finally, the principal weaknesses of the British National Enterprise Board are the conflicts in incompatible goals. As was emphasized in the July 11 memorandum to the House committee, this is a principal danger of an improperly structured development bank. Any separate goals such as the separate and conflicting tasks of the British National Enterprise Board should

be separated into subsidiary institutions which have sources and uses of funds and management capable of dealing with those distinct functions.

Sources and Uses of Funds: The British National Enterprise Board is, of course, 100 percent financed by the British government. Unlike the Canada Development Corporation, it does not have to float its stock issues or bonds on the private market. Therefore it does not have a market sensitivity.

The Canada Development Corporation is too sensitive to the marketplace; the British National Enterprise Board is not at all sensitive to the marketplace. The result is that the British National Enterprise Board can and does make unsound investments which are unproductive and in the long run a disservice to the British economy. The ideal is a mixed public and private financing in which the initial capitalization of the government provides flexibility but the subsequent financing is from the marketplace and is market sensitive as, for instance, in the case of the European Investment Bank. The Alaska Permanent Fund can be organized to create a substantial multiplier of private financing on its public capital which will both improve its performance and make more efficient use of its resources.

Management: The British National Enterprise Board, like the Canada Development Corporation, does not involve itself in the day to day management decisions of its affiliates or subsidiaries, a policy which should again be followed by the Alaska Permanent Fund.

It is also important to note the balance among government, business and labor on the British National Enterprise Board, a balance which may or may not have any relevance to Alaska.

Accountability: The British National Enterprise Board statute and its executive implementaiton provide some of the most striking models for the legislative and executive oversight of a large and powerful development bank.

First, NEB's financial reporting standards are extremely rigorous. Even in its Annual Report, all accounts are unconsolidated, so that the performance of subsidiaries and special purpose funds is apparent from casual perusal. For example, the conversion of a large portion of Rolls Royce government debt to public dividend capital was duly noted. This was a relaxation of financial discipline contrary, perhaps, to NEB's stated policy. However, this information was picked up by the British financial press and used by members of Parliament to bring political pressure to the struggle to impose stricter standards on nationalized industries. Since the solutions to

Britain's industrial problems must be worked out in the political as well as the economic and financial spheres, the informed participation of the interested public may serve as an important control on NEB's activity.

Secondly, day-to-day investment activities are subject to regulations designed to ensure that NEB is not displacing private market investment. While the success of these regulations is impossible to measure, it should be noted that CDC is under no such control.

Thirdly, and most importantly, NEB must justify its requests for investment funds on an annual basis to the Secretary of State for Industry, who makes the final decision on the disbursal of these funds. The Secretary is, in turn, accountable to Parliament, which appropriates the money. On one hand, this ensures that NEB's management is using its funds in a manner consonant with national policy and financial responsibility (to the extent these two goals do not conflict). On the other hand, such approval mechanisms may involve bureaucrats far removed from the operations of the assisted firms. They may also inhibit the timely provision of funds necessary to negotiate and effect deals. However, this does not seem to have been a problem so far.

INTRODUCTION

The Connecticut Development Authority (CDA) is one of many independent state agencies in the United States designed to assist existing small- and medium-sized firms in obtaining long-term debt financing for expansion and upgrading of physical plant and equipment. Created in 1973 by an act of the Connecticut state legislature, its operations to date are noteworthy on several accounts:

1) They have been self-sustaining. All operating expenses have been financed by service fees and float from efficient cash-flow management.

2) Screening procedures have been rigorous. Virtually all CDA service users have been financially successful.

3) Management has been innovative in harnessing the private money markets to provide finance to firms which, due to their small size, have had restricted access to capital on suitable terms, particularly during tight money periods.

I. OPERATIONS: PURPOSES, SOURCES AND USES OF FUNDS

The Authority manages five programs, each of which deals with a somewhat different aspect of providing expansion capital to small- and medium-sized firms. The volume of these operations in the past three years is shown in Table i, in terms of number of loans closed or insured and their total dollar amounts. Since

Table I

$ AMOUNTS IN MILLIONS

Program	Self-Sustain	Umb. Bond	Ind. Mort. Ins.	Small Business	Contractor
Year					
1974 #	37	18	2	5	-
$ amount	172.4	5.1	4.4	.09	-
1975 #	19	8	3	9	-
$ amount	48.6	4.3	5.2	.10	
1976 #	11	10	8	5	2
$ amount	35.3	4.9	21.2	.09	.04
Total #	67	36	13	19	2
$ amount	256.3	14.3	30.8	.28	.04

sources and uses of funds are functionally tied to each other by these financial mechanisms, these two important topics will be discussed in the context of the individual programs rather than summarized separately as in the other profiles in this series.

CDA's three major programs, both for volume of business and for purposes of illustrating the match of perceived need for financial services to program design are:

1) The Industrial Mortgage Insurance Program which insures loans made by private institutions to finance the purchase of plant and equipment;

2) The Self-Sustaining Revenue Bond Program through which the CDA administers a conventional state-wide industrial revenue bonding system; and

3) The Umbrella Loan Program, a direct industrial mortgage lending operation financed by revenues bonds of the Authority.

The Umbrella Program is the most innovative and aggressive of these operations and, for purposes of program design, the most important.

A. Self-Sustaining Revenue Bonds

In Connecticut, industrial revenue bonds are sponsored at the state as opposed to the local level. IRB's are a mechanism by which a state or municipal authority may transfer the tax-

exempt status of the interest it pays on borrowings to bonds of private industrial concerns. The recipient firms usually use the proceeds of such issues to finance new plant or pollution control facilities. These securities are evaluated in the market solely on the financial condition of the borrowing firm. Thus, state involvement lowers the interest cost, but not the risk, information or transaction costs--factors influencing the availability--of such capital. Hence the term self-sustaining. CDA charges a fee to cover the legal, investigative and administrative costs of such issues. These fees are used to cross-subsidize the more costly and time consuming operations involved in the other programs managed by CDA.

B. Industrial Mortgage Insurance

Purpose

Commercial banks tend to view smaller firms as risky borrowers due, mostly, to the volatile nature of the markets in which they operate. Larger firms are favored borrowers for several other reasons, including:

1) They offer the prospect of entering into larger, more profitable customer relations with the lenders for services such as business accounts (compensating balances).

2) Loan origination costs per unit of earning assets tend to be less the larger the loan.

3) Commercial banks are seldom willing to make loans with long repayment periods appropriate for the financing of plant and equipment, and small firms do not have access to the corporate bond and private placement markets which provide long-term finance to larger firms. CDA claims that banks have been willing to extend their typical five to seven year terms when participating in the insurance program. This reduces the borrowers' annual debt burden.

4) Small firms often cannot afford the downpayment on an asset required by banks under reserve requirements. Insured loans are not counted against reserve requirements under certain circumstances. Thus banks are induced to lower their up-front requirements of small borrowers.

Salient Features of the Service

Recent empirical studies show that, during periods of high loan demand, loans to small businesses are the first to be curtailed. In order to counteract the reluctance of commercial banks to lend on favorable terms to smaller businesses, CDA offers to insure all payments, interest, principal and property insurance, on loans for up to 90 percent [illegible] he value of new or expanded real assets and 80 percent of the value of equipment. Loans to recreation and commercial projects are not eligible for

coverage, nor are working capital loans. All loans must be secured by a first mortgage on the asset. Eligible borrowers include firms wishing to locate or expand facilities in Connecticut, community foundations, private developers or realty holding companies. Other important features of the service are:

Eligible projects: Manufacturing and processing or research facilities and offices or warehousing attached thereto;

Project limits: Real property - $10 million
Equipment -

Maximum terms: Real Property - 25 years
Equipment - 10 years

Application Fees: Sliding scale determined by loan amount.
Maximum - $7,500
Minimum - $300

Premiums: Real Property - 1/2 percent of outstanding balance
Equipment - 1 percent of outstanding balance.

Screening and Review

A bank which agrees to be the primary mortgage lender to a firm seeking an insured loan applies to the CDA for coverage on behalf of the borrower. The CDA screening process includes a review of the borrower's eligibility under the programs and a brief review of the firm's financial condition and plans. The bank

performs the usual assessment of the borrower's ability to repay the loan. The program rejection rate is approximately 10 percent.

Financing

The CDA supports its obligations under insurance contracts through an insurance fund in which all premiums are deposited. As of December 31, 1976, this fund stood at $2.4 million. Should this fund prove insufficient to meet its obligations, CDA may request that the State Bond Commission authorize the issue of general obligation bonds up to $100 million in order to cover defaulted payments.

Operating expenses of the program are covered by application and commitment fees.

Operating History

The Mortgage Insurance Program was begun in 1961 under the management of the Connecticut Industrial Building Commission. It was taken over by CDA in 1973. As of July 1976, the program had insured 123 loans (not including loans made under the Umbrella Program), and had suffered only three defaults. Through cooperation with creditors in disposing of insured property, none of these defaults ever led to a charge on the insurance fund. Bond authorization for $600,000 was used in one case to finance the

acquisition of a defaulted property. The CDA has been able to lease the repossessed facility at rates which more than cover debt service on the bonds.

Volume of activity under this program for the past three years has been three, two and eight loans per year, respectively. For the prior 10 years, the average number of loans insured was 11. The decline in insurance contracts may be traced to a cyclical loosening of the market for loan funds and to competition in similar services from the CDA's Umbrella Bond program. Because the Umbrella program has been used to deal with loans below $1 million, the average amount of the loans in the Insurance program has risen.

C. The Umbrella Bond Program

During the period 1970-1972, when markets for commercial loans to small companies were particularly tight, the management of CDA determined that it was necessary to take more positive action (than that permitted by an insurance program) to address the problems enumerated in the previous section. The CDA now issues tax-exempt bonds, the proceeds of which are used to provide long-term loans to small companies seeking first mortgage finance for plant and equipment. The process by which this is accomplished is rather complicated and might best be understood through a brief, step-by-step outline.

The Process

1) CDA solicits and receives loan applications from small firms with eligible projects.

2) After screening similar to that of a commercial bank's, applications are submitted to the Board of Directors for approval.

3) If the loan application is accepted, the borrower is issued a conditional loan commitment which (s)he uses to help procure temporary financing from a private institution for the construction of the project. The Authority may only make loans secured by completed projects.

4) Upon completion of the project, the Authority takes a mortgage from the borrower, the proceeds of which are used to pay off the construction loan. Umbrella program borrowers are required to participate in the Industrial Mortgage Insurance program. In order to finance this loan, the Authority has procured a $12 million line of credit with two commercial banks. Before the success of this scheme had been demonstrated, the Authority had issued Bond Anticipation Notes to cover interim financing. The line of credit reduces uncertainty over the terms and availability of interim financing, which in turn makes it less likely that CDA will violate IRS rules pertaining to arbitrage. During this period before a bond is issued to provide permanent financing for the mortgages, the Authority may charge its borrowers an interest rate of 1/2 percent above its own cost of funds.

5) When a sufficient number of loans have been made such that their repayment would secure a marketable revenue bond issue (about $10 million--minimum), the loans are consolidated into several series on the basis of size and maturity. (Series cannot exceed $1 million due to IRS regulations.) These revenue bonds are then sold to the public.

6) A portion of the proceeds of these bonds is used to pay off the interim creditors. The borrower's terms are then restructured so that interest rates under permanent financing are 1/2 percent above the Authority's cost of funds under the bond issue. After costs of issuance are paid, the remainder of the bond proceeds are placed in a Special Capital Reserve Fund whose function is described below. Principal and interest payments on the bonds are so structured that repayment of the loans should cover them.

Salient Features of the Service

Other features of the service are similar to those of the Insurance Program. The only significant difference is the project limits: $500,000 for real property, $400,000 for equipment. Besides being necessary to meet IRS requirements for unconsolidated reporting and filing, this limit targets services to smaller firms.

Screening and Review

The screening process used by the Umbrella Bond program is considerably more stringent than that at a commercial bank. Besides the usual financial records and projections, independent asset appraisals, security checks, insurance on principals, personal pledges and on-site investigations are required. These policies have paid off in that there have been no defaults during the program's five-year operating history.

Authority officials claim that the extra cost imposed on borrowers to meet these requirements are more than compensated by reduced interest and more favorable repayment terms of Umbrella loans.

Financing

In order to facilitate sales in an already crowded market for tax-exempt securities, the Umbrella Bonds have extensive financial backing. Should loan payments be insufficient to cover debt service, the first pool of funds to be tapped is a Special Capital Reserve Fund maintained at the level of one year's debt service. Should this fund fall below the required level, the Authority must use the Insurance Fund to make up the deficit. This fund is backed by general obligation bonding authority. Should these resources be insufficient to restore the Reserve Fund to its required

level, money from the general fund of the state is "deemed to be appropriated" at the end of each calender year to make up the deficit. Since this backing requires no legislative approval, it is a good deal stronger than the "moral obligations" which underlie most revenue bond issues. In some states, this arrangement is likely to be unconstitutional.

Operations are financed by the 1/2 percent spread between borrowers' interest rates and the Authority's cost of funds, application and commitment fees and float generated by deposit of loan payments prior to disbursement of debt service.

Operating History

The Umbrella program was established in 1972. As of January 1977, 173 firms had submitted formal applications of which 80 had been rejected or were voluntarily withdrawn. Seven were in process and 86 had been approved. Of these, 67 had been closed, and 66 were outstanding with a balance aggregating $24.4 million. Approved loans not yet closed totaled about $6 million.

These loans have been financed by two bond issues; one in 1975 for $23.5 million, of which $20 million was applied to permanent mortgage financing; one in 1977 for $10.5 million of which $9.2 million will be applied to permanent financing. The average loan size has been about $300,000 with the majority being for 25

years. Interest rates to borrowers, including insurance premiums, were 9.38 percent for real property and 9.3 percent for equipment on the first issue, and 7.23 and 7.73 percent for the second issue. Commercial interest rates without insurance coverage at the time of these issues were approximately 10.5 and 9.5 percent, respectively.

Considerable delay and difficulty accompanied the first bond issue, despite its AA rating due to the dislocations in the tax-exempt market caused by New York City's financial difficulties and the unprecedented form of the issue itself. The second issue, however, went off smoothly, the bonds being well-accepted in the marketplace.

D. Other Operations

CDA also administers, for the Connecticut Department of Commerce, two smaller programs funded by occasional general obligation bond issues of the state.

Cooperative financing of 502 Local Development Corporations - Under this program, the CDA lends 50 percent of the front-end investment which a local development corporation must raise in order to receive either SBA or EDA long-term financing. CDA is empowered to lend up to $2 million of its resources for this seed money financing. As of July 1976 it had made $228,000 in such loans.

Contractor's Loan Programs - The CDA has provided small loans on a contract by contract basis to construction firms who demonstrate a need for working capital to carry out procured contracts. CDA accords priority to minority businesses.

II. MANAGEMENT

The CDA is a subdivision of the Connecticut Department of Commerce. However, it is an independent agency whose operating decisions are made by a seven-member Board of Directors. The Board consists of the Commissioners of Finance and Commerce, the Treasurer and four members appointed by the governor, who have tended to be executives in private financial institutions. The Board is assisted on all Umbrella Loan decisions by a nine-man screening committee composed of experts in various sub-areas of industrial finance. Each loan write-up is submitted to three members of the committee who review the proposal and return a recommendation to the Board. These outside reviewers are compensated by a set fee for each loan reviewed.

The professional staff of ten, which performs most of the screening loan evaluation and program administration functions, consists of an Executive Director, managers for the programs, and loan officers. The fact that this staff is subject to state civil service regulation has caused some operating problems.

Because the state civil service commission regulates the Authority's hiring practices and the salaries it may offer, CDA has found it difficult to hire staff in the timely manner required by professional financial operations. It has also found it difficult to retain qualified personnel since the private market provides higher salaries and more opportunities for advancement to those with commensurate skills.

Although CDA is an independent agency, it is very much tied to the Connecticut Department of Commerce in which it is housed and whose Commissioner is Chairman of the Board. On one hand, this close connection is beneficial in that the Department's promotional activities are a source of new business. On the other hand, differences of opinion concerning professional judgment on financial matters have arisen between the Board and the Staff.

III. ACCOUNTABILITY

To The Executive

The Authority's operations are, for the most part, unencumbered by executive oversight or control. Approval of the Treasurer and the State Bond Council is needed in order to issue bonds, and yearly reports must be submitted to the Commissioner of Commerce. Indirect power may be exercised through appointments to the Board. However, any sanctions go into effect only if the

Authority is in financial trouble or wishes to expand its already generous program limits. Given CDA's record, this situation is not likely to arise soon.

Given the stringency of IRS regulations on disclosure and arbitrage and the competitiveness of an already-glutted tax-exempt market, it would appear that CDA is more fully accountable to the IRS, the banks with whom it cooperates, and its investors than to any state governmental body for its financial performance.

In terms of public benefits, CDA does require loan applicants to submit employment estimates for their projects. However, the Authority makes no attempt to analyze the incremental impact of their operations (new as opposed to retained jobs, replacement of private sources of investment funds, etc.). Authority managers state bluntly that these considerations are secondary to maintaining the financial credibility of CDA operations.

To the Legislature

CDA is not required to report its activities to the state legislature. This body exercises no sanctions over the operations of the Authority.

IV. EVALUATION

The CD. [illegible]as been particularly effective in countering the

informational and cyclical money market problems which many observers feel account for recurrent contractions in the long-term debt market for small firms. The benefits of the Authority's services can be divided into two classes: assistance in making capital markets more efficient, the pecuniary benefits of which accrue mostly to banks and investors; and assistance to firms receiving financial services, to the extent that these services would not have been offered on as favorable terms, or at all, by the private market.

Making Capital Markets More Efficient

Numbers of applications for CDA services have been highest during periods of tight money, indicating that the Authority picks up the private institutions' lower priority customers. Yet the Authority's borrowers and insurees have not been bad credit risks. In fact, the default rate on CDA's portfolio of "risky" loans is considerably lower than that of most banks'. This constitutes some evidence that the Authority is tackling informational problems sloughed off by banks and investment houses which prefer to lend to bigger customers. Through the Insurance Program and the Umbrella program, CDA reduces the information costs involved in adequately assessing the creditworthiness of small firms to banks and individual investors. The expenses for this

service, however, are borne by the borrowers through fees and premiums and by the taxpayers who must somehow make up revenues foregone due to the use of tax-exempt financing.

Benefits to service users have included access to capital during a period of universally-recognized shortage in the case of the first Umbrella Bond issue and access to capital on extremely attractive terms in the case of the second. Participants under both the Umbrella and Mortgage Insurance programs enjoy lower down payments and decreased annual debt burden, both of which may be important factors for firms with uncertain or variable cash flows. The size of these benefits, however, is nearly impossible to estimate.

Finally, it should be remarked that the CDA's success and integrity are due to the efforts of its management rather than to any features of its legal structure or capitalization. Similar arrangements have led to unproductive allocations of capital and serious defaults in mortgage insurance programs in other states and most notably in special-purpose public authorities with tax-exempt bond issuing powers.

V. RELEVANCE TO THE ALASKA PERMANENT FUND

Purposes: The principal importance of the Connecticut Development Authority to the Alaska Permanent Fund is as the best North American model of a state-sponsored development bank financing intermediate- and long-term capital for medium and small business on a collaborative basis with the private marketplace. The Connecticut Development Authority has been extremely efficient in carrying out that purpose.

The Connecticut Development Authority, however, need not take 90 percent of the risk in all of its financing. In that regard, the Massachusetts Industrial Finance Agency (modeled after the Connecticut Development Authority in most respects) is pursuing a course much more like that of the European Investment Bank in taking only 40 percent of the risk, once again ensuring local and private market participation in both the risk and the resources.

Sources and Uses of Funds: The sources and uses of funds of the Connecticut Development Authority are again the ideal model for this purpose of appropriate state backing to ensure that virtually all of the used funds are raised in the private market. The Alaska Permanent Fund will be able to set up the same kinds of reserves with its own capital resources without the

need of any Alaska General Fund backing, in my judgment, given the vast size of the Alaska Permanent Fund's paid-in capital resources.

Management: The Connecticut Development Authority has built up an extremely fine management, but has tended to lose good staff or not be able to hire them in the first place because of the constraints of a Civil Service salary structure. Were the Connecticut Development Authority capable of hiring independent professional staff as does the Canada Development Corporation or the European Investment Bank, it might be an even stronger institution.

The Connecticut Development Authority has also made good use of professionals from the private market both on its board and on its investment committee to ensure that its decisions are sound.

Accountability: CDA is essentially unaccountable to any division of the Connecticut state government. Any sanctions reserved to the executive are activated only in the event of severe financial crisis, say the default of a substantial number of insured or umbrella loans. Even the token legislative oversight entailed in "moral obligation" arrangements has been relinquished. This

insulation from democratic scrutiny and control has not left CDA operations free of political influence. The Executive Director of the Authority has reported confidentially that professional staff judgment on loan applications has been compromised, on occasion, by pressure from appointed officials to take on the deal.

INTRODUCTION

The Community Development Finance Corporation (CDFC) is a state-owned institution designed to provide equity investment in enterprises sponsored by community-based economic development organizations in depressed areas of Massachusetts. It was created by an act of the Massachusetts state legislature in 1975. It is funded by a $10 million general obligation bond issue authorized in 1976. At present, the CDFC Board of Directors has been appointed; counsel and accountants have been selected. However, the institution is not yet staffed, nor has it undertaken any investment activities.

Despite this lack of actual operating experience, CDFC is of considerable interest to policy-makers concerned with state assistance to community-based economic development in depressed areas. The institution has been the object of a great deal of interaction, not to mention controversy between government officials, businessmen, community leaders and academics. All these groups sought to have their political and economic interests in the design of CDFC's structure and operations. Some of these concerns have been addressed in the definitions, statements of purpose, required findings and operating procedures specified in the CDFC bill. Others, less easily-specified, will have to be worked out on a casy-by-case basis when operations begin.

The basic issues discussed in this profile are:

1) The nature of the financial needs of firms likely to locate in depressed areas; why these needs are seldom met by conventional financial institutions; how CDFC's proposed structure and operations are designed to meet these needs.

2) The mechanisms by which investment funds are to be targeted to eligible areas and projects. Where is investment likely to produce the greatest good in terms of increased employment and its concomitant benefits? What organizations are likely to be most capable of managing the investment?

3) The methods by which financial responsibilities and rewards will be distributed among CDFC, the management of the ventures it finances and the local public organization sponsoring the venture. How can the motivations of the key participants be balanced: the desire of the management of the enterprises financed for an adequate return on investment of time, energy and capital; CDFC's claim to a return on its investment sufficient to maintain operations; and the local organization's wish to ensure that substantial benefits accrue to its constituents?

4) By what standards, financial and social, can CDFC's performance be measured, and how can the various participants be held accountable?

I. PURPOSES

CDFC's purpose is to help increase levels of employment, capital ownership, tax revenues and overall economic activity in depressed areas by providing financial services to firms located or intending to locate in those areas. (See Section B for the legislative definition of depressed areas.) The plan for the type of financial services CDFC would offer proceeded from an analysis of the type of firms that could operate efficiently in depressed areas and their financial needs. The elements of this analysis were drawn from academic and empirical work on the determinants and patterns of business location and from the operating experience of financial, non-financial and governmental managers in Massachusetts. The argument for CDFC's planned operations is as follows:

1) Massachusetts employment, particularly in the manufacturing sector had been declining rapidly for at least 15 years prior to the formulation of the CDFC idea. The effects of this decline were particularly visible in cities and towns dependent on one or a few manufacturing plants for their economic activity. These towns contained high levels of surplus, semi-skilled labor and abandoned or underutilized physical plant.

2) Empirical analysis of the composition of employment level change, taking the individual states as the unit of observation, demonstrated that:

a) The creation of new firms and the expansion of existing firms contributed most of the increases in the number of jobs in a given state.

b) The contraction or closing of existing firms composes the greatest portion of the decrease in the number of jobs within a given state.

c) Interstate movement of business activities, despite the publicity such incidents received, accounted for little change in employment levels in the states of origin or destination. Most interstate moves were accounted for by the relocation of branch plants of corporations serving a national market. These moves were usually in response to conditions such as differential factor costs and proximity to markets which state governments, acting independently, were powerless to affect.

4) The actual location of smaller and newer firms was not adequately explained by cost-minimization. In the absence of such behavior, their location might be influenced by active state promotion and financial assistance. These firms accounted for approximately 80% of the manufacturing employment in Massachusetts.

5) At the time, CDFC was first proposed, the United States was suffering its worst recession since the Great Depression. New stock issues had slowed to five per year, and venture

capitalists were reluctant to invest in any company in its early stages of development. Without such investment, firms were unable to develop products, markets and operations to the point where they could attract debt financing from conventional sources.

6) The experience of business and financial people in Massachusetts indicated that there were many businesses, falling into several distinct categories, whose potential viability would be greatly enhanced by the provision of equity capital, but which could not offer the potential for return (30% is a frequently mentioned rule of thumb) sufficient to attract commercial venture capitalists.

The categories of firms were:

a) Manufacturers of high-technology products who needed time, money and freedom from debt burden to develop products and markets.

b) Firms in manufacturing industries which had been bought and subsequently mismanaged by national corporations and were now threatened with closure. In some cases, local management had fought to restructure ownership and control, re-establishing the plants as viable enterprises. Equity financing was essential to such deals in order to obtain favorable treatment from lending institutions.

II Evolution of the Alaska Permanent Fund

The permanent fund idea in Alaska gained popularity only after the $900 million North Slope lease sale in 1969. Following this sale, the Brookings Institute conducted a series of seminars concerning "The Future of Alaska." More than 100 Alaskans were invited to attend, to explore some of the major emerging policy issues, and to set forth a plan for Alaska's future. The participants agreed th , the "Alaska way of life" should be preserved. They defined this life-style as one which combines the conveniences of technological innovation with the opportunity and values of living as close to nature as possible.

After the Brookings seminars, several bills were introduced in the 1970 legislative session to establish some sort of "permanent fund" with the $900 million. However, other more immediate uses for the money were judged to be more important, and no permanent fund was established.

The 1974 legislature passed a bill creating the Alaska Renewable Resources Development Fund. This legislation provides that not less than five percent of nonrenewable resources income will be deposited in a separate fund beginning July 1, 1978. Monies can be appropriated from the fund only for capital and operating expenditures for the rehabilitation, enhancement, and development of renewable resources programs.

Another bill, which would have created a permanent fund by statute, passed the legislature in 1975. However, because of a disagreement with the legislature over constitutionality, the governor vetoed it. The 1976 legislature passed House Joint Resolution 39, calling for a constitutional amendment to establish the Alaska Permanent Fund. The voters approved that amendment in November 1976 by a margin of nearly nine to one.

The amendment lifted the prohibition against special dedicated funds to allow a minimum of 25 percent of all mineral lease rentals, royalties, royalty sale proceeds, federal mineral revenue-sharing payments, and bonuses to accumulate in a special fund separate from the General Fund. The only restriction on the use of the principal of the fund is that it must be for "income-producing investments" and, therefore, not for the general operating costs of government. The income from these investments will be deposited in the State's General Fund unless otherwise provided for by law.

The Joint House Finance and Judiciary Committee Chairmen's Report, detailing legislative intent for HJR 39, stated that sufficient revenue would be accumulated in the Alaska Permanent Fund to allow diversification of Alaska's economy and to insure that future generations receive benefits from development of the State's nonrenewable resources. The report noted that the fund would be restricted to income-producing investments "which the legislature would establish and change from time to time to meet the needs of the state." Use of the fund's earnings was left open to the legislature "to give future legislatures the maximum flexibility in using fund earnings—ranging from adding to fund principal to paying out a dividend to resident Alaskans."

The principal represents Alaska's mineral wealth transformed into dollars through the sale of natural resources to private developers. The legislature must decide what forms of wealth-preserving and income-producing assets this money should take. Our mineral sale revenues have recently been financing about 60 percent of state expenditures. When revenue from mineral sources begins to decline, part of the future role of the Permanent Fund may be to supplement the General Fund with earnings from fund investments or to help create a tax base to provide new state revenue sources.

Presently, the income earned by permanent fund investments can be channeled into any use the legislature designates. The House Committee on the Permanent Fund, therefore, must also recommend where and how to use the fund's earnings which, unlike use of the principal, need not produce income.

The governor anticipated voter approval of the permanent fund amendment. In August 1976 he temporarily expanded the membership and duties of the State Investment Advisory Committee, which is charged by statute to advise the commissioner of revenue on investment policy for the State. He directed the advisory committee to study and report on the estimated size, investment goals, management, organization, and public interest in the Permanent Fund.

The State Investment Advisory Committee conducted its deliberations with energy and diligence. Members conferred with consultants to produce draft legislation for a permanent fund structure. To arrive at its findings, the State Investment Advisory Committee examined consultants' reports on many of the resource-based monetary funds and development banks throughout the world.

In March 1977, two bills were introduced in the State House to begin debate on the structure of the Permanent Fund. Both bills would structure the Permanent Fund essentially as a development bank. Both measures propose a two-board management system, a policy board with overall policy-making power, and a committee under the policy board to approve investment proposals. Both bills also give the president of the permanent fund corporation strong executive power and sole responsibility for presenting investment proposals to the investment committee. Both proposals require that at least 40 percent of the fund must be placed in high-grade securities, but allow up to 30 percent of the assets to be invested in Alaska development loans and another 30 percent in community projects and private dwellings. Except for the appointment of the policy board members (who are subject to legislative confirmation under only one of the bills), both proposals would allow the fund to operate rather independently from the executive and legislative branches.

In 1977 the legislature passed an interim permanent fund management bill that will stay in effect until specific investment objectives and management structure have been thoroughly examined and agreed upon. It directs the commissioner of revenue to invest permanent fund money into various "money-market instruments," such as U. S. Treasury notes, certificates of deposit, and high-grade securities (not stock), all of which are relatively liquid and secure. As of July 15, 1977 four million dollars had accrued to the Permanent Fund and had all been invested in a savings account in the Bank of America and in U. S. Treasury notes. Almost $45,000 in interest has been earned in the first five months of its existence.

The House Special Committee on the Alaska Permanent Fund met on July 15 and 16, 1977 and heard testimony from a number of expert witnesses; two of whom presented papers on the establishment of the fund ("Economic Considerations in Establishment of Alaska's Permanent Fund" by Arlon Tussing, Institute of Social and Economic Research, University of Alaska and "Thinking About the Alaska Permanent Fund: A Cautious Approach for Alaskan Policymakers" by Belden Daniels, Department of City and Regional Planning, Harvard University). Copies of both papers are available from the Committee on request.

One of the major thrusts of Dr. Tussing's testimony was that there is no need or useful function for permanent fund investment in major industrial or commercial enterprise in Alaska, unless special reasons existed to subsidize them. Dr. Tussing's report infers that, at least initially, it makes more sense to invest the major portion of the fund outside the state.

Dr. Daniels emphasized that no development bank can create economic activity not already in existence; if there is no market or if costs are too high, "artificial" investment from the Permanent Fund will not help. Dr. Daniels suggested that the fund could provide needed commercial credit and financing of small- and medium-scale enterprises in Alaska but that fund managers should, in most cases, insist on market return for fund investments. A possible exception is economically feasible joint ventures with regional development corporations outside the major population centers. Daniels emphasized the importance of coordinated planning between the Permanent Fund and the General Fund.

During the 1977 legislative session, the Speaker of the House and the President of the Senate appointed special committees to consider alternative proposals for the Permanent Fund during the legislative interim. The committees will gather and distribute information, listen to public opinion, seek expert advice, consider how the fund should be administered, establish major goals for the fund, and present their recommendations to the full legislature in January 1978. The committees will make major efforts in the areas of public education and participation to learn what Alaskans want their permanent fund to be. This booklet marks the beginning of this phase.

Robert Lewellen

III The Fund in Relation to the Constitution and Other State Funds

Oil and minerals are a removable portion of Alaska's statehood entitlement to its citizens—past, present, and future. This nonrenewable wealth is now being extracted and transformed into another form of wealth—money. Dedication of that wealth to the Permanent Fund should provide an opportunity to make this wealth a renewable resource for many generations.

Although the form of the wealth is changing, the State still stands in the role of trustee, holding this resource wealth in trust for the benefit of the people of Alaska. Any objectives established for the Permanent Fund must be consistent with the same legislative obligations required for resource management. The legislature must decide into what income-producing assets permanent fund money should be placed. It is important to clearly define the obligations of the State before setting fund objectives.

The income earned from fund investments provides another source of wealth. Presently, a significant portion of state expenditures relies on oil revenues. The legislature has already stated that one objective of the fund is to diversify the state economy. As oil wealth declines, the Permanent Fund may bear the responsibility of supplementing the General Fund through income from fund investment, creation of an expanded tax base, or some combination of the two.

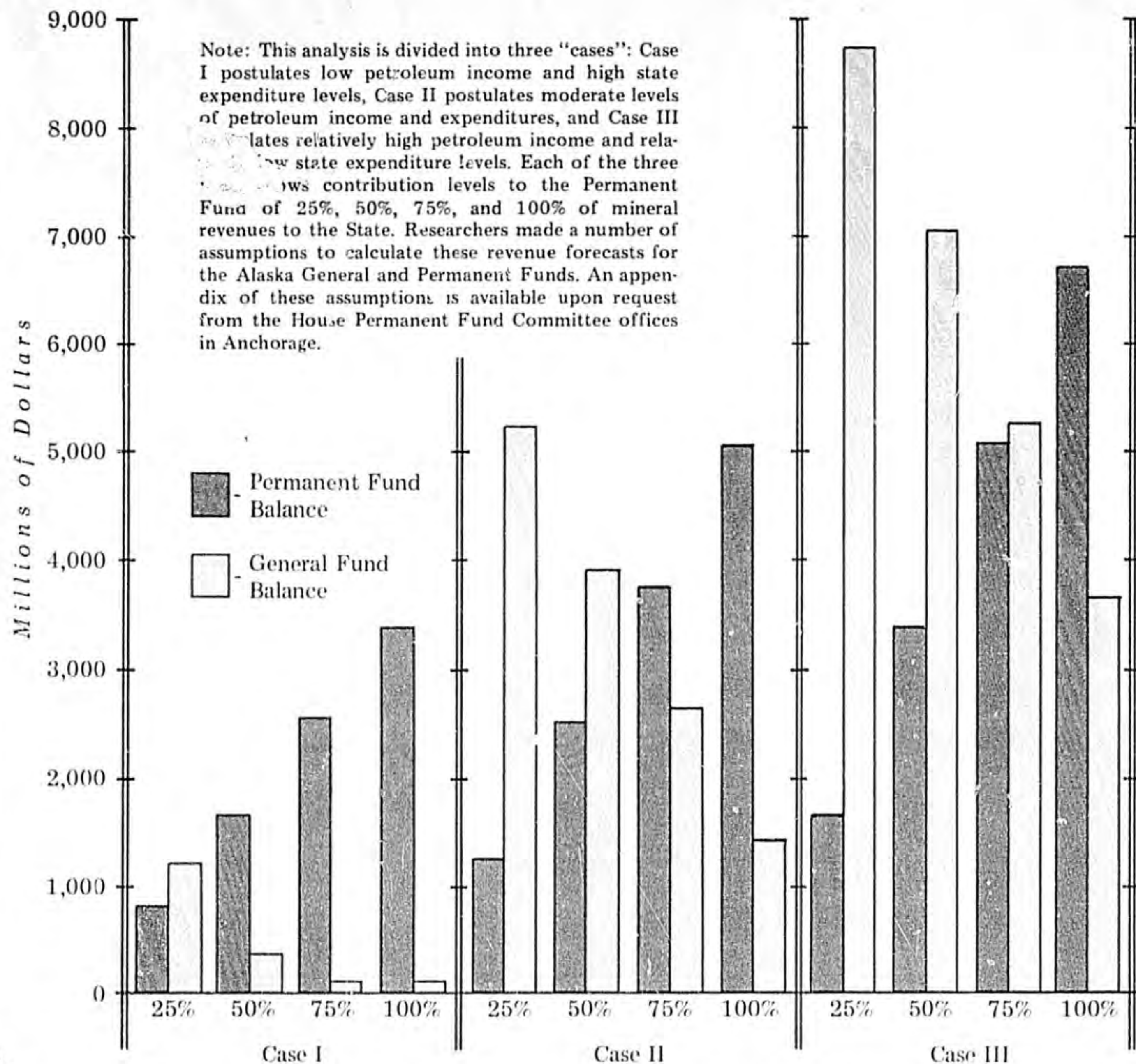
The Permanent Fund is one of several tools policy makers can use to achieve public objectives. Each year the legislature appropriates money from the General Fund to finance state activities. As required by the constitution, the General Fund is the sole repository (with the exceptions of the Alaska Permanent Fund and the Renewable Resources Development Fund) of all state revenues from all sources. The legislature is the only body empowered by the constitution to appropriate money from the General Fund.

The objectives of some of the general fund expenditures may be similar to those of certain investments of the Permanent Fund. For example, the State currently maintains loan programs to promote a variety of interests, ranging from business to home loans and senior citizen housing. Careful coordination with existing loan activities will help avoid duplication and conflict of programs.

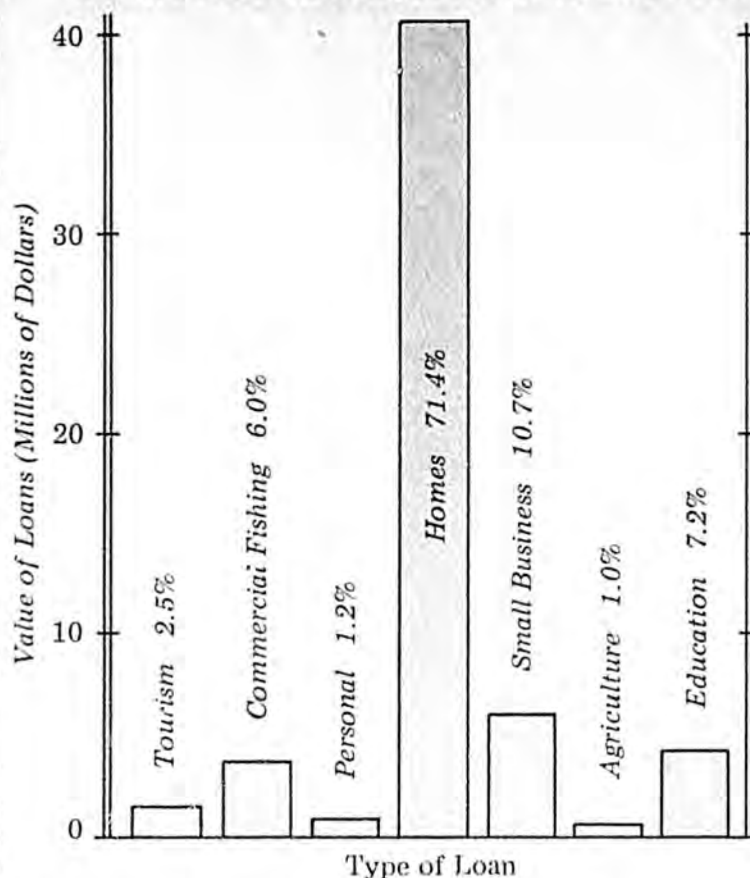
The State also possesses extensive bonding powers and can pursue major projects by issuing general obligation or revenue bonds. Special purpose agencies, such as the Alaska Power Authority, can (with legislative approval) provide for the financing of specific facilities. The State additionally has mechanisms, such as the Municipal Bond Bank, to assist local governments borrowing money to achieve their objectives.

These various tools should be considered as we ponder alternative fund uses so that we can best match tools with objectives. Further, provisions for coordinating permanent fund and other government activities will be a crucial element in developing the enabling legislation.

Figure 1
Revenue Projections through 1985



Source: State of Alaska, Legislative Affairs Agency, Research Division, July 14, 1977.



Source: State of Alaska, Office of the Governor, Division of Budget and Management, October 11, 1976.

The following state loan programs and activities are potentially eligible for permanent fund investment (i.e., they are "income producing," although the rate of return will vary):

(1) The Scholarship Loan Program provides loans to Alaska residents for postsecondary vocational and academic training with a forgiveness incentive for remaining in Alaska after completing school.

(2) The Fisheries Enhancement Revolving Loan Fund supports loans to nonprofit organizations or individuals for the development of hatcheries.

(3) The Municipal Bond Bank Authority is an independent public corporation to help Alaska communities develop needed public facilities by marketing general obligation bonds. The bond bank will purchase these bonds, offering its own revenue bonds to the public bond market.

(4) The Division of Business Loans administers five revolving loan funds and two public corporations—the Small Business Revolving Loan Fund, the Tourism Revolving Loan Fund, the Commercial Fishing Revolving Loan Fund, the Child Care Facilities Revolving Loan Fund, the Water Resources Revolving Loan Fund, the Alaska State Development Corporation, and the Small Business Development Corporation. These five loan funds enable qualified businesses and public utilities to obtain long-term financing for developing, expanding, or modernizing their operations.

(5) The Veterans Affairs Revolving Loan Fund makes loans to qualified Alaska national guardsmen and veterans in Alaska. These loans may be used to purchase, refinance, build and remodel homes, farms, businesses, and multiple dwellings. In addition, a qualified veteran may receive a loan for education, fishing, mining, or personal use.

(6) The Agricultural Revolving Loan Fund provides long-term, low-interest loans to promote rapid development of agriculture as an industry throughout the state.

(7) The Senior Citizen Housing Development Program provides loans and grants to municipalities, housing authorities, and other nonprofit local sponsors to stimulate new housing construction and for rehabilitation of existing units for senior citizens.

(8) The Alaska State Housing Authority (ASHA) and the Alaska Housing Finance Corporation (AHFC) are operated by the State for public and low-cost housing programs and state-supported financing for low- and moderate-cost private sector housing development. Currently, ASHA receives almost all of its funding from the U. S. Department of Housing and Urban Development and manages housing units throughout the state. AHFC makes or buys mortgages on low- or moderate-income housing, insures mortgages, and makes home improvement loans and loans for other associated costs of home ownership, including down payments, to qualified persons or developers. In addition, the State has established 13 regional Native housing authorities with powers essentially similar to those of ASHA. The federal government provides virtually all of the funds for these activities, so State participation is minimal and limited to insured short-term loans.

(9) The Alaska Power Authority is designed to promote the development of hydroelectric and fossil fuel power sources for domestic Alaska usage. The authority is generally empowered to issue bonds and notes to finance power development activities in the State, with the debt being secured by the projects themselves or by the earnings of these projects. This program is still in the formative stages and has yet to issue bonds.

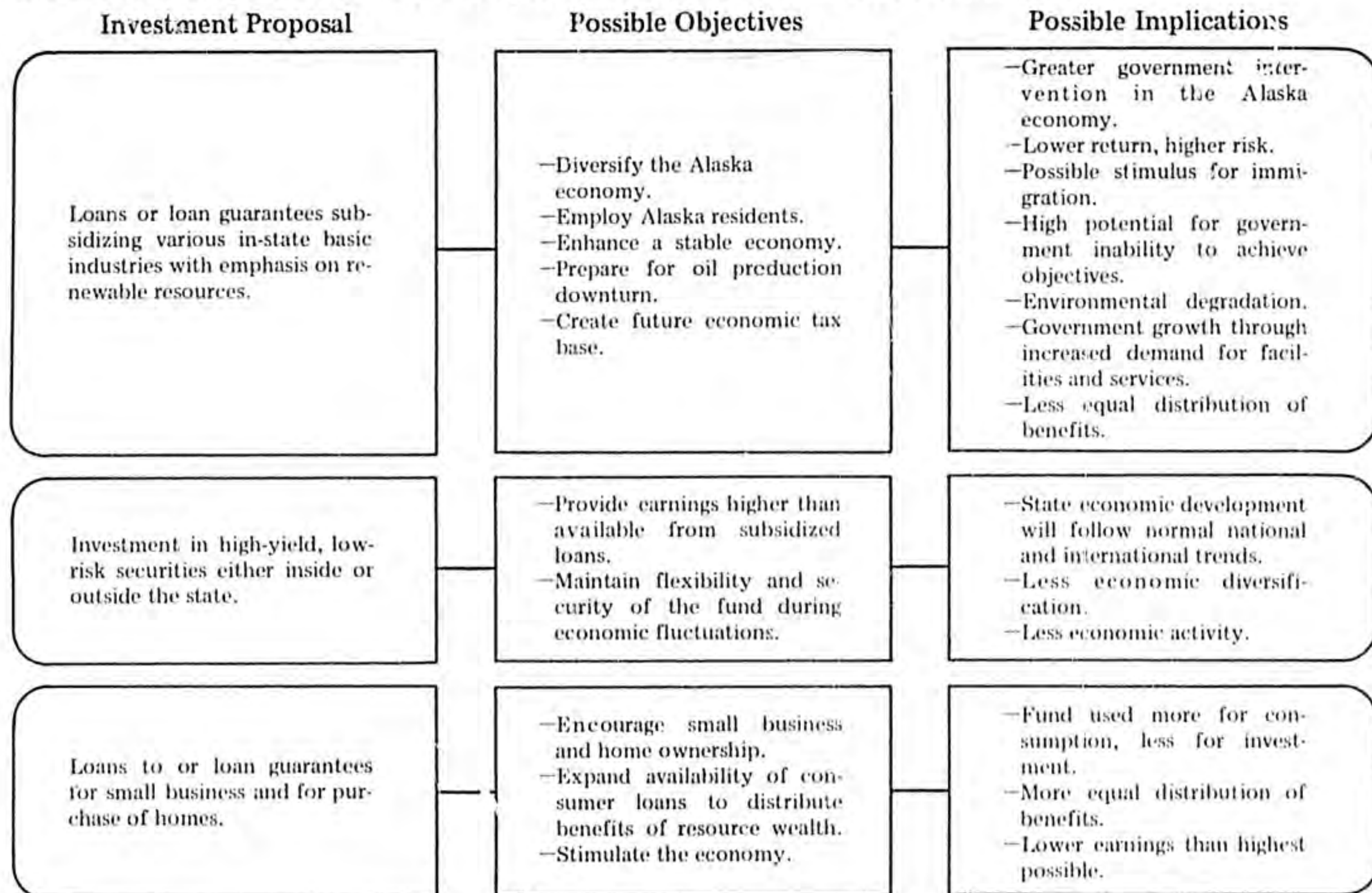
IV Objectives for Permanent Fund Investment

The people of Alaska should establish the overall objectives for their permanent fund. The committee hopes to achieve this through public meetings and other public participation and information programs to be held throughout the state in the coming months and through direct solicitation, such as the attached questionnaire. We need to know your priorities to write permanent fund enabling legislation.

The proposals listed below have emerged from the Alaska Public Forum, the State Investment Advisory Committee, survey research, and concerned individuals. The list is not exhaustive, nor are the proposals or objectives mutually exclusive. Remember that the types of investments made will determine the amount of income the fund earns.

Before you evaluate these proposals, consider the following: Many of the proposals for in-state investment may involve an interest or risk subsidy; that is, the money is loaned at lower interest or in greater quantities than borrowers can

Figure 3
Possible Objectives and Implications for Investment Proposals

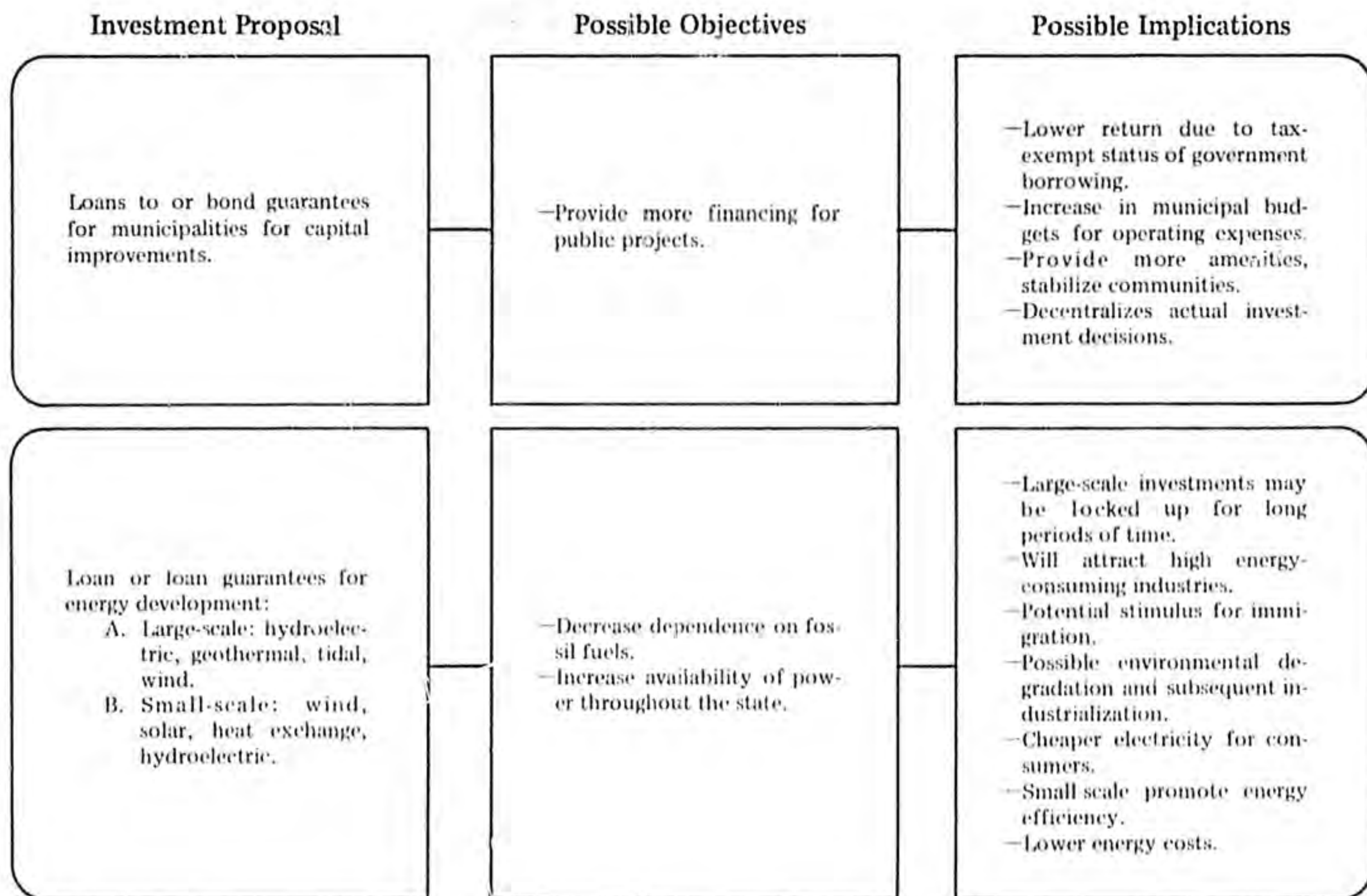


obtain from private lenders. The fund would earn a lower return than the market rate unless the General Fund makes up the difference (which has been proposed).

Subsidies may only make sense if the loan or guarantee launches an in-state enterprise that not only repays the loan but also creates new individual tax sources to cover the original subsidy as well as the cost of additional state and local government services and environmental and social costs generated. If no in-state opportunities exist, the Permanent Fund cannot create them. All investments must be thoroughly evaluated to separate the winners from the losers.

Another point to ponder is that objectives may often conflict. Although different strategies may be used to pursue the same objectives, each proposal lends itself to the achievement of some objectives more than others and even some to the exclusion of others. For example, a strategy which seeks to distribute fund benefits directly to individuals, such as consumer loans, will provide public facilities, such as through loans to municipalities. Likewise, strategies which seek to guide the State's economy through economic diversification, for example, probably will not maximize investment income.

Trade-offs are inevitable. As you identify the proposals that might best achieve your objectives, think about the likely trade-offs involved. Figure 3 shows sample investment proposals, their objectives, and a brief outline of the implications.



V Use of Fund Income

The income derived from investment of the Permanent Fund can be used for any purpose designated by the legislature. Before we present some of the most-often discussed proposals for use of the earnings from the Permanent Fund, we invite you to invent your own and include it as part of your response to this booklet.

The people who attended Alaska Public Forum meetings throughout the state last year and those who mailed in forum questionnaires expressed three main preferences for use of permanent fund income:

(1) Reduce taxes for Alaska residents.
(2) Loan it to Alaskans for renewable resource development.
(3) Return it to the Permanent Fund for reinvestment.

The governor has proposed that a portion of the income be distributed directly to Alaska residents. This plan, which he calls "Alaska, Inc.," would issue "shares" to each Alaskan based on residency. Each shareholder would receive a percentage of the fund income as a dividend, a process which the governor feels would draw public attention to the operation and effectiveness of permanent fund investments.

Each of these options for use of the fund income involves trade-offs, as discussed in the previous section on objectives for investment of the principal, and you should consider them as you decide how you would like the income used. Since the investment policy of the fund will determine the amount of earnings and the potential impact permanent fund investment will have on the Alaska economy, the committee feels that the use-of-income question should not overshadow thorough analysis of permanent fund investment goals.

Yvonne Mozée

VI Objectives for Control and Management of the Permanent Fund

A common concern of many Alaskans after realizing the potential dollar magnitude of their Permanent Fund is who will control this wealth. The only other fund of similar or larger size in state government is the General Fund. As discussed earlier, the constitution requires that all appropriations from the General Fund be made by the legislature and be subject to gubernatorial veto. After appropriation by the legislature, some agency of the executive branch usually administers general fund money.

The state constitution requires that the legislature determine what kind of investments are eligible for permanent fund money. However, the day-to-day management of the money may be delegated to an agency in the executive branch (as it is presently) or to an organization or organizations outside the legislative and executive branches.

The two critical management questions are: How much control over policy should be delegated by the legislature to another agency or agencies? To what extent will the managers in those agencies be accountable to the people of Alaska, either directly or through their elected officials?

If the legislature simply directs the managing agency to diversify the Alaska economy by making sound investments in Alaska's renewable and nonrenewable resources (one of the investment guidelines in H.B. 298), a great deal of discretion is left to the managing agency as to what is a sound investment, what resources to invest in, and which individuals or corporations will receive financing. For example, fund managers may decide to invest in a multimillion-dollar hydroelectric project, or they could use the same money for home loans to individual Alaskans.

Permanent fund managers must be accountable to elected officials and the public, but at the same time, they should not be vulnerable to political and special interest pressures in the loan-making process. "Politics" will not necessarily be kept out of loan decisions by placing experts on a board which is not accountable to the executive or the legislature. Clear, widespread notice to the public about the types of loans that qualify, how loans are applied for and granted, disclosure requirements for decision makers, publishing lists of loans or guarantees made, and regular auditing by the executive and legislative branches of government might provide at least a partial remedy to the control and accountability problems.

Current proposals call for appointment of managers by the governor (one adds confirmation by the legislature) with removal only for cause. The State Investment Advisory Committee discussed the possibility of elected members, but a brief look at Alaska's highly centralized government (with only the governor, legislators, and lieutenant governor being elected) indicates why this probably would not have been consistent with the state constitution.

An alternative to the highly centralized and rather independent management structure proposed in H.B. 298 would be for the legislature to provide for the administration of the Permanent Fund under the existing constitutional power of appropriation. The legislature, with approval of the governor, would designate eligible investments by law. The legislature annually would pass an investment bill for the Permanent Fund, much like the budget bill for the General Fund. The permanent fund investment bill would apportion available permanent fund money among the eligible investments.

Funds deposited in the Permanent Fund would temporarily be invested in liquid and secure money-market instruments pending each year's investment bill, as is now being done with permanent fund receipts. The legislature might choose to create new types of financial intermediaries and designate them as eligible for loans or loan guarantees in order to meet Alaska's changing capital needs. For example, the development bank corporation proposed in H.B. 298 could be one of the new financial intermediaries designated as an appropriate recipient of fund money. At the very least, legislative authorization could be required before loans exceeded a specific dollar amount.

The organization of the fund may profoundly affect how the fund performs, but the organization should reflect—not determine—the goals of the fund. Goals established today may not be those held by tomorrow's Alaskans. There must be built into any permanent fund structure both ability to protect the principal of the fund and responsiveness to meet changing goals.

National Park Service

VII Permanent Fund Questionnaire

The Permanent Fund belongs to you. What are your suggestions for use of the money? Would you please

Place
Stamp
Here

Special Committee on the Alaska Permanent Fund
528 West Fifth Avenue, Suite 270
Anchorage, Alaska, 99501

VII Permanent Fund Questionnaire

The Permanent Fund belongs to you. What are your suggestions for use of the money? Would you please take the time to share your ideas with us by indicating your preferences for permanent fund investment proposals. For each proposal, please answer the following questions. Feel free to suggest as many proposals as you think we should consider.

1. What investment proposal do you suggest and how is it income-producing for the Permanent Fund? [Example — invest in blue chip, preferred stocks]

2. What objectives are achieved by your proposal?

3. What objectives are avoided by this proposal? [Example — no diversification of Alaska economy, does not affect unemployment, does not affect consumer loans]

4. What may limit the effectiveness of this proposal?

5. Which groups would benefit from this proposal? [Example — financiers, brokers]

6. What groups are likely to oppose this proposal?

7. What are your suggestions for management of the Permanent Fund?

☐ Note: If you would like to receive further information on the progress of this committee, please check here and correct the address if necessary.

Special Committee on the Alaska Permanent Fund
528 West Fifth Avenue, Suite 270
Anchorage, Alaska, 99501

James B. Rhode
1150 East Bluff
Anchorage, AK 99501

THINKING ABOUT THE ALASKAN PERMANENT FUND:
A CAUTIOUS APPROACH FOR ALASKAN POLICYMAKERS

July 11, 1977

Belden Hull Daniels
Department of City and Regional Planning
Harvard University

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THINKING ABOUT THE ALASKAN PERMANENT FUND:

A CAUTIOUS APPROACH FOR ALASKAN POLICYMAKERS

July 11, 1977

INTRODUCTION: A Sense of Limits

The Chinese character for the word "crisis" is a combination of two other characters--"danger" and "opportunity." This could well be the symbol for the Alaskan Permanent Fund. As an outsider to Alaska who has worked for the last eighteen years in development banking and for the last thirteen in community and regional economic development, I am awed by both the opportunity and the danger posed to Alaskans by the Prudhoe Bay oil revenues and the challenge of creating an Alaskan Permanent Fund. I agree with Arlon Tussing that this is "an absolutely unique situation," different from any with which I have previously dealt in Asia, Europe, or the United States.

This leads me, as an outsider, to be doubly careful: first, in a short period of time I can only begin to understand the Alaskan political economy; second, I do not want to be precipitous in proposing specific solutions for the Alaskan economy based on experience in quite different settings.

In this initial memorandum to you, therefore, it seems most appropriate for me to limit my observations to three matters:

First, I would like to suggest a way in which you as Alaskan

policymakers might approach the problem of thinking about the uses of the Permanent Fund as one aspect of an overall Alaskan Economic Development Plan designed to prepare for the day when the Prudhoe Bay oil reserves are no longer contributing so handsomely to the Alaskan treasury.

Second, I would like to suggest for your consideration some general principles concerning the structure of the Permanent Fund as a development bank in terms of its purposes and powers, legal organization, management and capital structure, which have a general applicability irrespective of your particular goals for the Alaskan economy over the next twenty years.

Third, I would like to suggest a few specific ideas concerning the especially difficult tasks of community and regional economic development, based on the experiences of others.

In making these observations, I am mindful of your unparalleled opportunity to use these resources to build a strong, permanent economy through investments which produce both a reasonable internal rate of return on investment to the Permanent Fund, and a reasonable external rate of return to the economy as a whole and to the treasury of the state. On the other hand, I am equally mindful of the parallel danger that these resources could either be wasted through improper management or improperly employed in ways which create far greater distortions to the

Alaskan economic base or to some of its specific sectors, regions and communities.

It is important for all of us to realize that the dangers of economic distortion are particularly acute in development banking. I realize that the use of the Permanent Fund as a development bank is only one alternative which you are considering. However, since development banking is my professional field it is the only alternative upon which I will comment.

Because development banking is a somewhat "trendy" idea these days, there is the very real danger of creating a development banking institution which is not sufficiently thought out. Some of the specific dangers include designing a development bank with conflicting goals, or with a capital structure which is ill-suited to carry out those goals, and/or with a management likely either to be inefficient or else unaccountable to public policy governance by the executive or the legislature. Even more serious, there is the danger of proposing a development bank to solve a problem which is not a financial one--that is, one in which the solution does not lie in either reducing the cost or increasing the availability of capital. If, however, the problem is in fact a financial markets problem, it may well be that it is caused by some existing form of governmental intervention which is seriously dislocating the financial marketplace. The least expensive

solution in that case would be to remove the governmental regulation, rather than to create one more governmental development banking "gimmick."

Finally, there is a tendency to disregard or to misapply the vast body of multinational and national development finance experience that has accumulated in Third World countries and in Europe and Canada. It is my understanding that Price Waterhouse and White, Weld have given the state a systematic analysis of that experience.

When it comes right down to it, development banking is the most direct, aggressive, and high-risk form of public economic intervention. This suggests that it should be used with great caution. Your own experience with some thirteen state revolving loan funds would seem to confirm the fact that development funds created with high hopes often do not achieve the goals for which they were intended. What is called for, therefore, is a careful, step by step analysis of the nature of the specific economic problem before you. Then, after carefully weighing the relative costs and benefits of different options, you should select the most efficient, cost-effective solution--a solution specifically tailored to stimulate real economic development in Alaska.

As an outsider, I cannot determine what your economic goals should be. On the other hand, I can, perhaps, suggest a way of

looking at the limited aspects in which the Alaskan Permanent Fund, as a development bank, can be a part of your overall effort to use the full resources of the Alaskan state government to help create a sound, balanced, broadly-based economy.

The following outline proceeds step by step through a series of questions which may help you review your design of the Alaskan Permanent Fund in terms of your economic goals over the next twenty years. These questions are divided into three units:

* First, what is the nature of real economic activity in Alaska and Alaskan financial markets, and what is the current impact of federal and state governmental intervention on both real economic activity and financial markets?
* Second, what are the different mechanisms which the Alaskan state government can use either to stimulate or retard the overall direction of the economy and the state's financial markets?
* Finally, wh are the limited ways in which the Alaskan Permanent Fund can be a part of such an overall economic development effort by the Alaskan state government?

Throughout this discussion, there is an emphasis on limits: the limits of any state government to affect overall state economic development; the limits of development banking to contribute

to that overall economic development effort. If these limits are recognized and accepted, the likelihood of a soundly conceived and soundly implemented Alaskan Permanent Fund is much greater.

I. THE NEED FOR A COMPREHENSIVE ALASKAN ECONOMIC DEVELOPMENT PLAN WHICH RECOGNIZES THE LIMITS OF STATE INTERVENTION IN THE ECONOMY AND THE APPROPRIATE USES OF A DEVELOPMENT BANK

First Principles

Before we begin to propose any specific form and function for the Alaskan Permanent Fund as one mechanism to help stimulate economic development, we need to have a conception of what is actually happening in both the Alaskan goods market and financial markets and what the present consequences of federal and state intervention are on both real economic activity and the flow of capital in the state. In order to do this on a current and ongoing basis, the Alaskan state government needs to establish a permanent economic development planning process which makes full use of the capabilities of both the public and private sector and the universities, and which develops a reasonable consensus about the forces at work in the Alaskan economy.

I would like to emphasize that there is nothing unAmerican about such a comprehensive, ongoing planning process. I am simply suggesting that the state of Alaska undertake the same kind of careful planning with regard to the husbanding of its capital assets as any American Fortune 500 corporation would do in order to profitably employ its resources. The tools have been admirably

developed in the private marketplace; they are there, ready to be incorporated by a state willing to look upon itself as a public enterprise.

This planning process needs to be realistic about the limited capability of the state to affect either worldwide market forces or federal policy. These plans must also incorporate an understanding of the limited capability of any financial intermediary to affect the course of real economic activity.

Financial markets operate only on the supply side of the economic question. They cannot, by themselves, create a demand for economic activity that is not there. A critical question Alaskan policymakers will have to face and answer is: What is the capability of the Alaskan economy to absorb the capital supplied by the Alaskan Permanent Fund? Although I am not in a position to answer that question, I suspect that it will be some time before the Alaskan economy has the capability to absorb anywhere near the amounts of capital available to the Permanent Fund.

Moreover, the cost of capital represents only a very small portion of the cost of doing business. Other worldwide market forces and federal governmental actions far more profoundly affect the cost of production than the cost of money does. It is these worldwide market forces and governmental actions which we must attend to first. Two corollaries to this point deserve careful note:

First, in very few instances is the cost of capital a serious impediment to sound economic development. There are, however, occasional circumstances where the scale of economic activity, or the location of that economic activity, or the relative risks and rewards of the economic activity, make the availability of capital for that activity virtually nonexistent from a private market standpoint. It is in these circumstances that public intervention in capital markets is appropriate, *if* stimulating that economic activity would significantly benefit the state economy and treasury. Since the question is one of availability rather than cost, in very few circumstances are below-market interest rates either necessary or appropriate for a public development bank. Examples of the kinds of economic activity which may be of real economic benefit to the Alaskan economy and treasury, but for which there may be insufficient available capital include: rural industrial and commercial development, housing development, the development of new technologies which reduce the cost of production in Alaska for either refining or adding value to Alaska's renewable and nonrenewable resources, and scales of enterprise which are either too small or too large for the private market to finance with a sufficient return coincident with risk. These examples will be analyzed in greater detail in sections below.

A second consequence of the fact that this cost of money is not an important cost of production is this: seldom will lowering the cost of money on the supply side compensate for high costs of production in the marketplace. For example, a petrochemical industry in Alaska is apparently not now financially feasible because of the high costs of production. This problem cannot be solved by lowering the cost of money for petrochemicals through an Alaskan Permanent Fund.

However, lowering the cost of capital can encourage short-run economic activity which is in the long run essentially unsound--and which has a high likelihood of eventual failure.

In summary, a long-term Alaskan state economic planning process must filter out the large number of cases in which development is not dependent on the cost and supply of capital, and in which other public policies are less costly and more appropriate to the solution of the problem. Conversely, the planning process needs to define more precisely those situations in which the economic problem is indeed a financial market problem amenable to solution by Permanent Fund investment. Obviously, these tasks are two sides of the same coin.

In undertaking an overall economic analysis of Alaska and the limited ways in which the Alaskan Permanent Fund can affect overall economic development, I would like to suggest four key

investment areas for the Alaskan Permanent Fund which deserve much more detailed analysis; this analysis would seem to determine the extent to which real economic activity which is financially sound and of economic benefit to the state is now limited by the insufficient availability of capital at a reasonable cost. Two of the areas represent investments within Alaska, and two represent investments by the Permanent Fund outside of Alaska.

A. Potential Kinds of Investment by the Alaskan Permanent Fund Within Alaska:

1. Investments Which Contribute to a Sound, Balanced Alaskan Economy Less Dependent on Nonrenewable Resources and Government Spending

The Alaskan economy is, apparently, at the present time far more dependent on governmental spending than is the American economy as a whole. Moreover, much of the current primary economic activity in Alaska is dependent on nonrenewable resources which are being developed largely by outside interests, with the principal value-added activity taking place outside of Alaska. The result is primary economic activity which is particularly labor-intensive, seasonal, and cyclical. Therefore, economic planning should focus on those possibilities for creating primary, value-added industrial activity in Alaska which can produce goods at a cost competitive in worldwide goods market.

In analyzing ways in which the Permanent Fund might contribute to a more broadly-based economy, it is useful to make two sets of distinctions: first, between income-producing and infrastructure investments; second, between income-producing investments which (from the standpoint of private market opportunity costs) appear to be too large for the private market to undertake and those which appear to be too small.

a. Potential investments too large for the private market

Given the increasing efficiency and scale of worldwide money and capital markets, you, as policymakers, need to consider whether or not there are sound potential investments in Alaska's renewable and nonrenewable resources which difersify the Alaskan economy but which are too large for private enterprise to finance on its own at a sufficient return competitive with other available risk opportunities. The $9.7 billion investment by the oil companies in the Alaska pipeline suggests that there are few investment opportunities too large for the private market. In this instance, on a worldwide opportunity cost basis, the rewards as well as the risks to the investors were and are very great. However, there may be opportunities for the development of both renewable and nonrenewable resources in Alaska which are sound

investments but which do not provide a sufficient return coincident with risk such as investments in petrochemicals or iron-ore reduction. Here, the Permanent Fund could joint venture with private enterprise in order either to reduce the risk or increase the return.

In analyzing the relative returns and costs of public intervention in such cases, at least four issues require the most careful calculation: What are the underlying goods-market or financial-market reasons for lack of adequate private market capital for the project? Could these obstacles be overcome by a public investment? Do the public benefits warrant the risk? If they do, can a public-private joint venture be constructed which does not disproportionately shift the risk to the Permanent Fund and the rewards to the private market?

The scale and efficienty of worldwide capital markets suggests that the private market is capable of undertaking any large-scale projects--if they are sound. If the private market is unwilling to risk it, the Permanent Fund should be extremely cautious in considering intervention.

Yet, there may be another question: Who should own the enterprise and reap its rewards? In this regard, the Canada Development Corporation is an important model for the Alaskan Permanent Fund, as it considers public intervention in such large

investments, as well as when and whether ownership of such large-scale enterprises should become Canadian. The Canada Development Corporation, created in 1971 with an initial government investment of $250 million, has since had the largest public equity offering in Canada's history ($150 million in preferred stock sold to institutional and individual investors). It now has assets of $1 billion and owns a number of formerly foreign-owned, large-scale enterprises. Depending on the standards by which performance is judged, it has had a mixed record; it is nonetheless worthy of your close scrutiny and consideration.

b. Potential support for medium and small enterprise

The second area in which, as a matter of public policy, it may be necessary for the Alaskan Permanent Fund to supplement private investment in order to stimulate more balanced economic development is in support for the retention and expansion of medium- and small-sized business enterprise by ensuring access to adequate intermediate and long-term expansion capital through existing commercial banks and thrift institutions. Because of the evolving nature of worldwide credit markets and the strictures of governmental intervention, such smaller firms have an increasingly difficult time securing adequate longer-term expansion capital.

We are moving, world wide, to a multiple-tiered money and capital market. This phenomenon is not peculiar to any one jurisdiction such as Alaska, although it can have differential impacts in different jurisdictions depending on the nature of the local economy. The Massachusetts economy, for instance, is unusually dependent for its employment base on medium and small industry. Even its fastest growing high-technology companies (very profitable firms under $100 million in sales which are growing at 20 to 40 percent per year) have considerable difficulty accessing sufficient amounts of either equity or intermediate and long-term debt, because of the structure, scale and efficiency of the private market and impediments (often unintended) created by state and federal intervention in both goods and financial markets.

It should be clearly understood that the problem is not the availability of short-term working capital. Commercial banks, finance companies and factors take good care of these needs. The problem is not price. Many of these ventures could be financed at above-market rates. The problem is that often the length of terms needed are too long for many commercial banks, yet the sizes of loans are too small for most insurance companies, and, finally, the nature of the industrial and commercial loans are beyond the competence of most thrift institutions.

Federal S.E.C., I.R.S., E.R.I.S.A., bank, savings bank, and savings and loan regulations simply make matters worse. (State regulations do too, but since this is something you can do something about, state regulation is reserved for special discussion on pages 34 through 39, below.)

If you decide that some form of support for intermediate and long-term debt for medium and small commercial and industrial enterprise is warranted in Alaska, it is critical that any intervention by the Permanent Fund be developed in close collaboration with and through existing commercial banks, savings banks, savings and loan associations, and credit unions. This is essential for several reasons: If the state acts alone, the odds are much higher that it will make a bad loan, whereas acting through the local financial community, it can bring their money and judgment to bear, thereby reducing both the cost and the risk. Collaboration also strengthens and integrates the financial community more firmly into the local economy.

Once again, it is not necessary for the Alaskan Permanent Fund to reinvent the wheel. The single best state development bank providing longer-term credit support for small business in collaboration with banks is the Connecticut Development Authority, which has been steadily expanded and amended since 1958. Virtually every American state, Canadian province, and European nation

has a similar, if less effective, intermediate credit facility. In development finance, as in medicine, one can learn a great deal from institutions which have not worked well. We want to avoid mistakes knowingly as well as emulate successful models.

c. Infrastructure investments

Potential infrastructure investments necessary either to provide access to natural resource development or to create the environment in which a profitable market investment can be made should only be made after careful economic analysis has in fact determined that, if those infrastructure investments are made, the costs of production and rates of return are such that the resulting economic enterprise is competitive in worldwide goods markets. The world is replete with examples of infrastructure investments made in Asia, Africa, or Latin America (not to overlook empty federally-funded industrial parks in Appalachia) in the hope that _if_ they were made, real economic activity _might_ result. In most instances, those were dashed hopes.

Although the Alaskan Permanent Fund may well be the most appropriate vehicle for making that infrastructure investment, any non-market costs should be borne not by the Permanent Fund but by legislative appropriations from the Alaskan General Fund.

2. Investments Which Decrease Economic Disparities Between Alaskan Regions, Communities, and Demographic Groups

The second major area in which the Alaskan Permanent Fund can be a part of an overall economic development strategy within Alaska is in strategies to minimize the rate of increase in economic disparity among regions and demographic groups within Alaska. Note the conservatism with which I make that statement: I did not say eliminate the gap; I suggest for the time being that a more limited goal is more reasonable and realistic--simply to minimize the rate at which the gap widens. For instance, at the present time, the south central region of Alaska has 54.5 percent of the population and 63.2 percent of the gross state product. On the other hand, the Arctic and western regions have 16.3 percent of the population and only 8.8 percent of the gross state product. Although I do not have the precise figures, I suspect that those regional disparities have increased over the past ten years, and that without economic development planning and intervention on the part of the state, they will continue to increase at a faster and faster rate over the next twenty years. I would also guess that the 155,000 Alaskan citizens living outside the major cities are subject to more cyclical, more seasonal, and more labor-intensive industry than Alaskans employed in the principal cities and in the southeastern and south central regions.

If this growing disparity does exist, and a decision is made to use state resources to try to narrow the gap, there are specific community and regional development banking experiences in the United States and overseas which can be employed by the Permanent Fund to contribute to that goal. These experiences are described in greater detail below, on pages 54 to 59.

If the state makes such a policy decision, Alaska has a unique opportunity to organize a portion of the resources of the Permanent Fund specifically for purposes of joint venturing with the Alaskan native corporations in order to assist them in developing petroleum and natural gas resources on their land, as well as hard-rock mining, forest production, and fishery resources within their territories.

B. Potential Kinds of Investment by the Alaskan Permanent Fund Outside Alaska

As I have already indicated, I have not yet had access to the economic projections for Alaska of the state government, the Alaskan banking community, or the University of Alaska's Institute of Social, Economic and Government Research. Nevertheless, it seems a reasonable presumption that the enormous potential capital resources of the Permanent Fund are too great to be appropriately absorbed in investments in the above two categories if those investments are to be sound, income-producing investments.

The important question then is: How might the balance of the funds be reasonably invested? I would suggest two potential categories of investment for the Permanent Fund outside Alaska:

1. Investments Outside Alaska Which Contribute to Overall Alaskan Economic Development

Areas of economic activity which deserve careful consideration include investment in the development of technologies which would decrease the production cost of either the removal of natural resources from Alaska or the refining of those resources within Alaska. Similarly, the Alaskan Permanent Fund might invest in the development of technologies which would add economic value to natural resources in Alaska before export.

This is another instance in which the Alaskan Permanent Fund may need to "supplement private investment when sufficient private capital is not available on reasonable terms and conditions." The development of these technologies may require investments by the Permanent Fund either within or outside Alaska. Because of changes in the structure of American capital markets over the past twenty years and because of changes in federal policy with regard to securities regulation, capital gains taxation, and the imposition of extensive new limitations on institutional investors, there is virtually no capital available in the United States

today for start-up investments in new technologies or for investment in technological innovation outside of large multinational corporations.

If it seems reasonable, as a part of Alaska's overall economic development plan, to invest a portion of the Alaskan Permanent Fund's resources in the creation of locally owned technologies, once again, there are good development banking models for such technological investment. These include the thirty-year-old National Research Development Corporation (NRDC) in Great Britain, SOFINNOVA in France created in 1971, the Connecticut Product Development Corporation (CPDC) created in 1974, and the Technology Development Corporation now before the Massachusetts legislature.

2. Investments in Investment-Grade Securities

I have come to the issue of investing a significant proportion of the Permanent Fund's assets in marketable securities not from the vantage point of safety, but from the vantage point of development finance: it is simply unlikely that there will be sufficient income-producing demand for development finance in Alaska to absorb the full resources of the Permanent Fund. Therefore, having carried out its development banking function, the Permanent Fund will have to invest the remainder of its substan-

tial resources in marketable securities. In addition, the investment of a significant portion of Permanent Fund resources in marketable securities will strengthen its financial integrity as a development bank.

Finally, even if the Permanent Fund has only its minimum capital base of $2 billion, it will be not only one of the world's largest development banks, but a sizeable financial intermediary by any worldwide standard. It will be sufficiently large-scale to operate in the worldwide money and capital markets as a major lender, investor, and supplier of capital. It must therefore have the most able management that money can buy, capable of operating with both prudence and profitability in such sophisticated markets.

To sum up, I want to underscore two major points: first, as a capital-supplying development bank, the Alaskan Permanent Fund cannot create real economic activity; it can only support economic activity for which there is a genuine market demand but an insufficient capital supply.

Second, the Alaskan state government has other tools within its economic arsenal which it should use as a part of an integrated, overall economic development plan to stimulate the economy; the Alaskan Permanent Fund is one of the tools which can contribute to that overall economic development--a tool with its own inherent limitations.

Before we consider in detail the goals, structure, and strategy most appropriate for the Alaskan Permanent Fund, I would like to outline my sense of the other tools which the Alaskan government should employ in contributing to overall economic development for the state. If Alaska's ependiture policy, tax policy and regulatory policy are not honed into a single, coherent, economic development policy, the capacity of the Permanent Fund to affect positively the economic diversification of the state will be severely curtailed, and its own investments jeopardized.

II. USING THE FULL RESOURCES OF THE ALASKAN STATE GOVERNMENT TO PLAN FOR AND CONTRIBUTE TO A SOUND, BALANCED ECONOMY

In planning state government intervention to stimulate economic development, I suggest an order of battle which considers expenditures policy first, tax policy second, and administrative regulation designed to stimulate the flow of private capital third, before considering a public investment. If a public investment is then deemed necessary, I suggest a careful consideration of tax expenditures and administrative grants before finally deciding to create a development bank such as the Permanent Fund as a vehicle for carrying out that economic development policy. Each of these four points are discussed below.

A. The Role of State Expenditures in Stimulating Economic Development

State expenditures can either be an investment in the creation of real economic activity in the state or, as is more often the case, state expenditures can represent both a disincentive to real economic activity and a disinvestment from real economic activity.

This misuse or use of state expenditures for economic development is compounded by the general proposition that state

expenditures rise to meet state revenues. This has certainly been the case in Alaska since 1969, and is a principal motivation for the creation of the Alaskan Permanent Fund. The principle, however, is universal; in Massachusetts, the level of state expenditures (and therefore the level of taxes) rose from 26th out of 50 states in 1958 to an unenviable third in 1977. The result in Massachusetts today is to drive industry and real economic activity out of the state because Massachusetts is simply too expensive a jurisdiction in which to do business, relative to other parts of the U.S. and the world.

There is, however, a unique aspect to Alaskan state expenditures which is shared by no other state in the United States. Simply speaking, Alaskan government _is_ the economy. Combined federal, state and local government expenditures account for 40 percent of the state's employment--a figure nearly twice as high as that for the United States as a whole. Thus, as Arlon Tussing has pointed out, governmental expenditure in Alaska is the driving arm of the state's economy.

This is fine so long as there are revenues to support the expenditures. Massachusetts is again a case in point: Today Massachusetts wage earners and corporations are being asked to support an enormously high level of unplanned and unproductive expenditure which was rather widely distributed in the space-

technology boom of the 1960's, but which are now being imposed at an increasingly high tax level on a shrinking economic base.

For individual states like Massachusetts and Alaska which cannot print money or set up tariff barriers in the manner of the federal government, there is a limit to which expenditure policy can be used as a means of stimulating the economy. Because the Prudhoe Bay oil reserves are finite, and will not always be the principal revenue producer for Alaska that they are today, it is essential that the state's General Fund as well as its Permanent Fund be invested in ways which will create real economic activity and a strong permanent tax base. In this regard it is useful to think of tax revenues as forced savings that have the same "potential" as private profits for creating productive enterprise through investment. If tax revenues are not used to create a productive public investment in this way, the state will have made a disinvestment from the economic marketplace which might have been more productively employed if the capital had not been removed from private savings by taxation.

I would like to suggest that the Permanent Fund represents a unique and bold opportunity to rethink not only the function of a state government as a stimulator of overall economic activity, but also the very structure of state government as a public enterprise. We have already noted that the state planning process

should incorporate corporate planning techniques in which the revenues and assets of the state as a public enterprise are invested in order to increase future income flows and the future asset growth of the state. I would like to carry that idea one step further. I would like to suggest that we view the structure of state revenues and expenditures as similar to the income and expense statement of a corporation. In this analogy the annual dedication of revenues to the Permanent Fund is the retained earnings of the Alaskan people. The Permanent Fund itself represents the net worth of Alaskans as a part of an overall balance sheet for the Alaskan state government and its constituents.

If we think about the relationship between the General Fund and the Permanent Fund in this way, the task of state government on an annual basis is to expend its General Fund in ways which will contribute to an increase in revenues and therefore lead to an increase in annual net retained earnings which can be put into the Permanent Fund as a constantly increasing net worth.

Similarly, the task of the Permanent Fund is to invest those net retained earnings in ways which will contribute over time to an increased revenue flow to the state. This suggests a constantly increasing net retained earnings on current account (the General Fund) and a constantly increasing capital base for the economy on permanent account (the Permanent Fund).

Seen in this light, all state expenditures from the General Fund must be as productive and qualitative as those made by the Permanent Fund, and the two must be part of the same planning process. Otherwise, one will cancel the economic impact of the other.

Finally, the net retained earnings flowing into the Permanent Fund are an equity base which can leverage substantially greater short- and long-term liabilities from the worldwide capital market, as does the World Bank. The following crude income and expense statement and balance sheet for the state as a public enterprise suggests these ideas graphically.

THE STATE AS A PUBLIC ENTERPRISE

Income and Expense Statement

Annual State Income from Individuals, Businesses, and Oil Revenues	General Fund Current Social Overhead Expenditures and Infrastructure Investments
	Permanent Fund Annual Retained Earnings of the People; Annual Contribution to Net Worth for Future Investment

Balance Sheet

Current Assets	Current Liabilities: Annual Expenditures for Social Overhead
Fixed Assets	Long-Term Liabilities: State Bonds to Finance Infrastructure
	Permanent Fund Long-Term Bonds
	Permanent Fund Net Worth

B. The Impact of Tax Policy on Alaska's Economic Development

Alaska is in a unique position with regard to its revenue structure in that the vast bulk of its revenues are not derived from taxes borne by individuals or businesses native to Alaska. A serious future problem, however, is whether Alaskan residents and resident businesses will be able to support through tax revenues an expenditure level generated during the salad days of high oil royalties and other natural resource taxes. Massachusetts once again is an unfortunate illustration of the fact that although expenditures rise to meet revenues they do not automatically decrease when a revenue base begins to shrink or disintegrate. Given the fact that the oil revenues to Alaska are "temporary," if the tax burden in the future is not to fall abruptly

and harshly on residents and resident business of the state, expenditure levels must be controlled now. For, although it is clear that expenditures are the driving force in the expenditure-revenue connection, in a highly competitive worldwide market, the level of taxation is the factor of state policy which most discourages private market investment in individual states.

Once again, Alaska is unique in relation to other states in that it has relatively low individual and business tax (because of the current high level of state income from oil revenues). Should the situation dramatically change, however, as it has in Massachusetts, primary industry which _can_ locate elsewhere will do so.

In order to understand the impact of the level and structure of taxation on economic development, it is important to dispel two myths and underscore one reality.

Myth 1: Tax Incentives Offered by State Governments to Private Business Do Not _Stimulate Economic Development. Rather, They Represent a Gift or Equity Grant Directly to the Private Business_. A review of the economic literature and business experience demonstrates that tax incentives granted by state governments are too small to affect the business judgment of corporations. Thus, since the tax avoider would have made the business investment in any event, the result is simply to grant, as a gift

to the business firm, tax revenues which the state would otherwise have collected. The business firm incurs no expense it would not have chosen to incur anyway, but receives additional income in the form of tax forgiveness. This represents a direct contribution to the net income of the business firm.

Since tax incentives represent a direct transfer of otherwise collectible state revenues to the private firm, it is easy to understand why business groups are highly supportive of such tax incentives.

Tax incentives are simply a beggar-thy-neighbor contest between states, in which each state seeks to outbid its neighbor without affecting any real economic activity.

Myth 2: The Level of Corporate Taxes is Not a Significant Real Factor in Stimulating Economic Activity in the State. First, all corporate taxation represents a very small cost of doing business. Second, 50 percent of corporate state taxes are paid for by the federal government as a deduction against federal taxes. Third, in most instances, corporate taxation acts as a sales tax--that is, it is passed on to the consumer. For example, the Alaska oil royalties and taxes are directly passed on to the consumer; moreover, they are not borne by Alaskans. In fact, most primary industry anywhere

tends to be export industry and passes on its corporate tax to consumers throughout the world, whereas distributive industry passes its corporate tax to local consumers. This inhibits economic development only to the extent that the incidence of taxation unduly raises the cost of living, and hence the cost of labor, in the state.

Reality 1: The Critical Aspect of State Tax Policy as It Affects Economic Development is the Level of Personal Taxation, Its Impact on the Cost of Living in the State, and Therefore on the Cost of Labor in the State. Labor is the single largest cost of production for any business enterprise. (This is clearly true outside of Alaska, but once again I hesitate to jump too quickly to the conclusion that what is true elsewhere is automatically true inside Alaska. Alaska's harsh climate, enormous internal distances and difficult terrain, as well as great external distances from world markets may mean that other costs of production are disproportionately higher in Alaska than in other parts of the world, and that labor represents relatively a smaller proportion of the costs of production.) Therefore to the extent that state taxation significantly increases the cost of living and hence the cost of labor, it significantly increases the cost of doing business in the state.

Again, the level of taxation is only significant to the

extent that the industrial or economic base of the state is at all footloose. Obviously, the entire distributive sector of the economy is dependent on primary industry and is essentially a captive of the state economy. Similarly, to the extent that basic industry is dependent on natural resource development, it too is a captive of the state economy. The level of state taxation on natural resource development will affect economic activity only to the extent that it bids up the cost of production and therefore the price of the product beyond a competitive world market price.

Once again, Alaska is in a unique position--quite different from that of, say, Massachusetts, which does in fact lose a substantial amount of its industry just over the border to New Hampshire because the basic differential costs between the two states are the levels of state taxation.

At present, therefore, Alaska has some margin of taxing freedom, given its relative isolation, its relative dependence on the governmental sector, on natural resource basic industries and on a captive distributive sector. However, should Alaska's long-term economic plan require the development of a value-added basic and secondary industry, it will become much more subject to shift-share competition between the states.

As with expenditure policy, Alaska stands out in comparison with other states in that its tax structure does not appear to

discourage economic development. However, as Alaska moves toward a diverse, stable economy, the influence of its taxation policies on economic activity will probably become much greater and more like that of states in the lower 48.

C. Regulatory Policy as It Affects State Economic Development

In analyzing the impact of state regulatory policy on economic development, it is important to distinguish between real economic activity in the goods market and financial activity in the financial markets.

On the one hand, state environmental policy, land use policy, transportation policy, energy policy and labor policy all involve regulations which affect the real costs of doing business in the state. Often the costs imposed on economic enterprise are not the costs of the policies themselves but the cost in lost time due to the procedures by which the policies are implemented. It is often possible for a state to reduce the cost of a regulation through a change in process without modifying its substance.

On the other hand, the impact of state regulatory policy on state-chartered, privately-owned financial intermediaries directly affects the flow of capital to enterprises in the state. This issue is central to the question of how to design and structure an Alaskan Permanent Fund. In line with the aim of invoking the

most efficient, cost-effective solution which involves the greatest return and the least cost or risk, a public policy which would achieve economic development goals through administrative stimulation of the flow of private capital rather than through public investment would appear to be more cost-effective. Two critical issues require careful consideration here. First, is it a realistic possibility to shift the flow of private assets through administrative action in ways which respect the sometimes conflicting goals of prudence, profitability, and economic public policy? Second, if it is, is such a solution actually in the public interest?

There are two principal ways in which public administrative intervention might be able to shift the flow of private financial assets in order to carry out a public purpose while still meeting the tests of prudence and profitability: the first is to change the rules of the regulatory game; the second is for the government to act as a public entrepreneur to create a new financial intermediary which will be either initially or eventually privately owned.

1. Changes in the Regulation of Asset Management of Privately Owned Financial Intermediaries in Order to Stimulate Economic Development. First, let us look at state chartering and regulation of financial intermediaries such as life insurance

companies, commercial banks, savings banks, savings and loan associations, and credit unions. Initially, states chartered these financial intermediaries in order to contribute to the development of the economy of the state and its communities. As these financial institutions suffered collapse and failure in various recessions and depressions over the years, states became less concerned with how the assets were invested in economic development than with protection of liabilities due depositors.

I suggest that a review of ways in which state regulation could be amended to stimulate the flow of assets is a very fruitful avenue for further exploration. Such a review should be undertaken in close collaboration with the financial industry itself, for there are many ways (as we have found in Massachusetts) to modify regulations affecting asset management that are mutually attractive to both the state and the financial institutions themselves.

In Massachusetts, by way of example, we discovered that only one Massachusetts corporation, Gillette, was an eligibile investment for the $25 billion state-chartered thrift industry. Through a collaborative process of Massachusetts industry, the thrift institutions, the banking commission, and the legislature we have now amended those regulations so that all Massachusetts corporations above $25 million in sales are eligible for investment. We

did this in ways which protected depositors, provided a profitable return to the financial institutions, and did not compromise the availability of the assets of these institutions for housing development.

2. State Government as a Public Entrepreneur to Create a New Financial Intermediary Either Initially or Eventually Privately Owned. A second way in which the state might stimulate the flow of private capital to further economic development goals is for the government to act as a "public entrepreneur." This means the creation of a new financial intermediary which is either initially privately owned, or initially has some public capital, but eventually becomes wholly privately owned.

From a private market standpoint, there may well be sufficient return on investment coincident with risk if only such an institution could be put together at a sufficiently aggregate scale. Such a private development finance intermediary may well provide risk-pooling and information and transaction cost pooling that is diseconomic for any single existing institution. Yet, it may not be worth the cost for a single private financial institution to undertake the promotion of such a new development finance intermediary.

In such circumstances, the government may undertake the formation of the private institution as a public entrepreneur in

order to benefit from the public externalities of increased jobs, increased individual and corporate tax receipts, and reduced welfare and other social overhead costs. That is precisely our recent experience in Massachusetts in entrepreneuring the $100 million Massachusetts Source Corporation, to be owned wholly by the Massachusetts insurance industry, and the Central Development Facility, to be wholly owned by the Massachusetts banking industry.

The key public question is: Will the institution be accountable to produce not only its private return on investment, but the public return as well? The answer lies in careful legislative chartering of the institution to ensure that there is adequate reporting and legislative oversight so that its activities may be monitored to see that the public purposes are achieved.

One Example: An Alaskan Central Bank for Local, Cooperative Banks and Credit Unions. One such institution which might contribute to rural community and regional economic development in Alaska would be an Alaskan central bank for existing rural unit banks or new cooperatively owned full service deposit institutions chartered by residents of small towns in the state.
If the central bank of such a network is well designed, is able to borrow in international markets, and has very strong management, yet is owned by its member local institutions, it can be a vehicle to supply whatever capital is demanded locally to meet

housing, commercial and industrial development. Local sensitivity to local needs and how to meet them is coupled with sophisticated management and capital access at the central state level. Good models for such institutions exist as close as the British Columbia Central Credit Union, and as far away as the German D.G. Bank. Both institutions are models of local initiative and cooperative ownership coupled with centralized managerial and capital efficiency. They have provided the model for the recently constituted Central Development Facility in Massachusetts.

Similarly, the U.S. Federal Farm Credit System provides the model for the creation of a network which is initially publicly capitalized but which over time is purchased by the users themselves. The Farm Credit System was initially 100 percent federally owned and is now 100 percent owned by individual farmers and ranchers working through local cooperative institutions throughout the United States.

In summary, I strongly urge a careful review of existing state regulations with regard to asset management of state-chartered financial institutions, and a collaborative effort with those institutions to determine if there are ways in which the state might either modify regulations or act as a public entrepreneur to create a new privately owned financial intermediary which, under discreet legislative oversight, would contribute to the overall economic development plan of the state at no cost to the treasury.

D. Choosing Among Kinds of Public Investment: Which is More Equitable or Efficient, a Public Investment Made Through the Tax System, or Made Through a Grant or Subsidy Administered by the State Bureaucracy, or Made Through an Investment in a Development Bank?

Finally, before we leap into a detailed consideration of the Alaskan Permanent Fund as a development bank, it is important to realize that a public investment in economic development by the state of Alaska could be made in any one of three different forms, each of which has different consequences in terms of its relative efficiency and equity. They are:

(1) Tax incentives, more properly called tax expenditures, such as an investment tax credit, in which the legislature chooses to forgo tax revenues in order to try to stimulate capital investment in either a particular location or a particular scale of enterprise or a particular sector of economic activity;

(2) Grants and subsidies administered by bureaucrats such as the ten revolving loan programs now existing in Alaska, in which the legislature appropriates funds to the executive to be funneled by bureaucrats in order to try to stimulate particular kinds of economic activity in particular areas; and

(3) Independently chartered public development banks such as the proposals for the Permanent Fund, which are capitalized by

a public investment, authorized by the legislature, and administered by the independent board and a professional staff.

Each of these three forms of public investment has different consequences from an equity and efficiency standpoint in terms of their capability to carry out their specific public purpose.

Tax Expenditures, for instance, are subject to very limited governmental oversight. Once established by authorization of the legislature, they require neither annual appropriations by the legislature nor executive management. They do, however, cost the taxpayers as much as a similar program financed by an administered grant through annual appropriations. Tax expenditures are thus a favored form of public investment by special interest groups and most private enterprise, especially since their application is initiated by the tax avoider rather than by the legislature or executive. Most academic analysts agree that their economic impact is generally questionable from an efficiency standpoint, in that the tax expenditure is generally too little and too late. Moreover, from an equity standpoint, tax expenditures tend to favor rich individuals and corporations over poor individuals and small businesses, especially those located in depressed areas.

Grants and Subsidies administered by the state bureaucracy, on the other hand, are often criticized because they require too

much legislative and executive oversight. Administered grants may be more equitable in that they are accessible to smaller enterprise, lower-income persons, and poorer regions of the state; however, academic and entrepreneurial analysis agree on the relative inefficiency of this form of public investment, which usually operates with little or no sensitivity to the marketplace and a very high administrative cost. Given this inefficiency, even the equity argument is weak, because the designated public purpose is often not carried out.

It is my understanding that the ten existing state revolving funds, which would fall into this category, have recently been subject to just such criticism. I would suggest that, as a part of Alaska's economic development planning, the revolving loan funds be carefully reviewed in order to determine if in fact they are carrying out their public purposes. I would further suggest that serious consideration be given to shifting their operation from that of a bureaucratically-administered revolving loan fund to development finance intermediaries which might be operated as subsidiaries of the Alaskan Permanent Fund.

Finally, Development Banks, such as the Farm Credit System at the federal level, or state housing development finance authorities at the state level, tend to operate at a relatively high level of efficiency and market sensitivity, but may suffer from

more conservatism than public policy warrants and from insufficient executive or legislative control.

At this point I do not propose to make any absolute judgment about the relative equity or efficiency of any of these three forms. Rather, you need to recognize that each of these forms of public investment has its own relative costs and benefits which need to be carefully weighed in making specific decisions about a specific kind of public investment to carry out a specific public purpose. In different circumstances each of these forms will be more or less efficient or equitable in contributing to a specific piece of the overall economic plan of Alaska.

III. STRUCTURING THE ALASKAN PERMANENT FUND AS ONE TOOL IN ALASKA'S OVERALL ECONOMIC DEVELOPMENT PLAN

If we decide that the Alaskan Permanent Fund operating as an Alaskan development bank is one appropriate mechanism for dealing with certain aspects of Alaska's overall economic development, our task then is to structure the Permanent Fund so that it does what we want it to do.

It is worth reemphasizing that we cannot even consider this task until we have decided that:

* the economic development problem to be addressed is not a problem in the goods market, but a problem in financial markets;
* it is not a problem created by some existing form of public intervention which should be undone;
* it is not a problem which is best solved by administrative regulation of the flow of private market financial assets; and
* if there is to be a public investment, it is not a problem best solved by a new tax expenditure or a new bureaucratically-administered grant or subsidy program.

As noted in the beginning of this memo, development finance is the form of economic intervention that poses the highest risk.

It is therefore the last solution to be considered--only after having considered and either used or rejected all other forms of public intervention.

In designing the Permanent Fund as a development bank, there are four central questions we need to answer:

* First, what should be the limited goals of the Alaskan Permanent Fund within the framework of Alaska's overall economic development plan?
* Second, what should be the legal structure of the Alaskan Permanent Fund so that it is equitable and efficient in carrying out those goals, and yet accountable to the executive and legislature?
* Third, what board and staff management structure is best suited to carry out these goals?
* Fourth, what capital structure is necessary to ensure that the Alaskan Permanent Fund has the financial capability to achieve its purposes?

In addressing these questions, I have first approached the problem in general; then I have compared it particularly with the two drafts of the Alaskan Permanent Fund available to me, HB-298 and HB-300.

The comments that follow are intended to help clarify, or raise additional questions about, a basically sound draft document.

In order to be sure that I understand the meaning of particular words and phrases in these draft bills, and perhaps to be of some assistance to you in making their meaning unambiguouous, I've done a rather thorough exegesis of the key provisions. In all cases, I refer to the draft of HB-300, unless I particularly note HB-298.

A. What Should be the Limited Goals of the Alaskan Permanent Fund Within the Framework of Alaska's Overall Economic Development Plan?

Almost all development bank proposals are initially marked by three serious problems: confusion of goals, trying to do too many things at once, and assigning to the development bank responsibility for delivering more than it is capable of delivering. In considering any new development bank, we need first to remember that this new development finance institution, like any financial intermediary, can operate only on the supply side of the economic equation. Second, international and domestic experience make it clear that we should be precise in defining the goals of the institution and modest in our expectation of its impact on state, regional, or community economic development. Finally, if there are separate goals in terms of the cost or availability of capital, these separate goals should be implemented (as we shall see

in our discussion below) through separate arms of the development bank which are capable of differentiating risk, sources and uses of funds, and specialized management capable of achieving those specialized goals. In assessing the goals of the Alaskan Permanent Fund in light of these principles, it is most useful to look beyond the general purposes articulated in Section 10 to the more specific investment criteria in Section 40:

Investing Only in "Income-Producing Investments" (Section 10 and Section 40) is the single most important investment criterion of the Permanent Fund. Permanent Fund investment strategies should also be organized to bring private judgment, at private risk, to joint venture in most projects in order to ensure that the investments are soundly planned, managed and overseen. This key provision recalls our "First Principles," pages 7-11: public intervention through a development finance intermediary to stimulate economic development is warranted not because investment opportunities are unsound, but because from the standpoint of opportunity cost, the private market has opportunities to employ its resources at greater return or lower risk than, as a public purpose, the state may be able to afford. Moreover, as we noted earlier, the issue is seldom the cost of capital, but rather, its availability. Therefore the Alaskan Permanent Fund will rarely be warranted, as a development bank, in offering substantial below-market interest

rates. The costs of capital, like state and local taxation, represent a very small percentage of the cost of production; and differential rates in the cost of capital seldom make the margin of difference in the economic viability of the enterprise. Yet the problem of the availability of capital for new technology development, or for small- and medium-sized commercial and industrial enterprise, or for community-based enterprise, is often a serious public policy problem.

Should it be determined that some form of subsidy is essential for certain large-scale infrastructure developments, or some community development or rural housing development projects, that subsidy should be provided by the General Fund, as our earlier discussion and Section 130 (4) suggest.

The rest of our analysis of the goals of the Permanent Fund is most easily done by a careful review of the three essential investment criteria for (1) investment-grade securities, (2) productive private enterprise, and (3) community development. This analysis conveniently fits our earlier discussion of potential investments for the Permanent Fund on pages 11 through 23.

1. Investment-Grade Securities:

Section 40 (1) provides that "At Least 40 Percent of the Resources of the Permanent Fund Shall be Invested in Investment-

Grade Securities." (Section 10 (1)) This is a sound provision for two reasons (to which we have already made reference):

First, because development banks operate only on the supply side of the investment equation, it is not all clear what the capability of the Alaskan economy is to absorb Permanent Fund investments either for longer-term capital investment in productive private enterprises or for community development projects. Therefore, all capital which cannot be reasonably absorbed under those two categories should be invested in investment-grade securities. It is important, however, that a sufficient percentage of those investments be made in sufficiently liquid securities so that they will be available, when needed, for investment in productive private enterprises or community development projects. Second, this 40 percent investment in investment-grade securities not only "preserves the Permanent Fund's capital for future generations" (Section 10 (6)), but also acts as a kind of secondary reserve for the potentially high-risk investments in productive private enterprises and community development projects.

2. Investments in Productive Private Enterprise

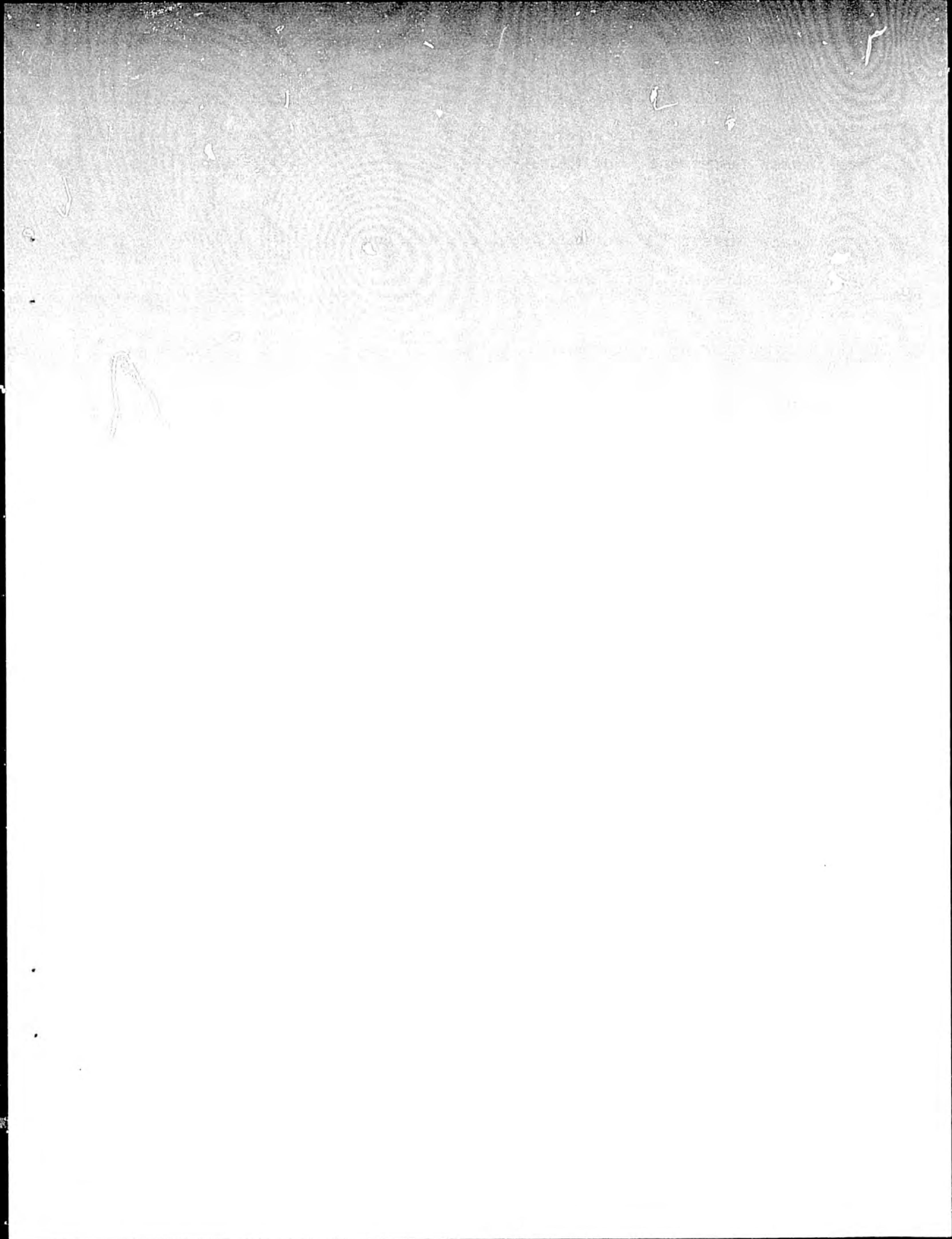
Section 40 (2) provides that "The Permanent Fund May Invest Not More Than 30 Percent of its Resources to Provide a Reasonable Proportion of Longer-Term Investment Capital for Financing the

Establishment, Improvement, and Expansion of Productive Private Enterprise Which Will Benefit Alaskans, and for Which Sufficient Capital is Not Available From Other Sources on Reasonable Terms. These Investments May Take the Form of Equity, Debt, or Debt Guarantees."

Each of the above underlined phrases is sufficiently important to warrant individual comment:

"Not More Than 30 Percent" suggests a reasonable and realistic upper limit of risk in terms of the availability of public development capital subject to demonstrated real demand for it. It is never possible to be rigorously precise in measuring the capital gap for publicly-needed capital. Development banks are best constructed to meet a reasonable demand and then organized in such a way that they are demand-sensitive, so that if there is a demand there is capital available. If such capital is not available, there is of course the alternative of adjusting the balance in investment-grade securities.

"A Reasonable Proportion" suggests that the Permanent Fund should not invest other than in collaboration with private financial intermediaries. Federal, state and local as well as international experience strongly support the idea that the public development bank investment is likely to be more sound if it is made on a joint venture basis with the private market.



the private market is generally quite capable of filling this need. Second, the state has limited capability to influence short-term cyclical changes in worldwide markets or federal fiscal or monetary policy (in this regard, I trust the phrase "seek to smooth the cyclical pattern of growth of the Alaskan economy" (Section 10 (2)) refers to long-term redress of cyclical problems in the Alaskan economy resulting from overdependence on nonrenewable resources, and does not refer to short-term business cycles). Third, it is only in the longer-term capital markets that any capital gaps critical to overall state economic development arise.

"Establishment, Improvement and Expansion": Pages 11-21 of this paper, I outlined three kinds of investment opportunities where the establishment, improvement or expansion of sound, income-producing, productive private enterprises of benefit to Alaskans may not have sufficient private capital available on reasonable terms or conditions. These three kinds of investments include:

* sound investments in Alaska's renewable and nonrenewable resources which diversify the Alaskan economy but which are too large for private enterprise to finance on its own at a sufficient return coincident with other available risk opportunities;
* the development of new technologies essential to the refining and production of value-added manufacturing of

renewable or nonrenewable resources in Alaska before export; and

* support for the retention and expansion of medium- and small-sized business enterprise by ensuring access through commercial and savings banks to adequate intermediate and long-term expansion capital.

In each instance, there needs to be a rigorous analysis of the economic and financial soundness of the sector, the reasons for lack of adequate private market capital availability (if it, in fact, exists), and the relative benefits and returns, costs and risks of public intervention through the Permanent Fund.

"Productive Private Enterprises" appropriately requires that investments only be made in financially sound enterprises which are also income-producing, job-producing, revenue-producing, and contributing in real economic terms to the Alaskan economy.

"Which Will Benefit Alaskans" is a vital phrase requiring that the investments made in enterprises that are not only financially sound but also in which the economic benefit to the residents of Alaska is greater than their economic cost to the state. This critical issue will be discussed in detail under "Legal Structure and Accountability," pages 59-67, below.

"Not Available from Other Sources on Reasonable Terms" is also essential to ensure that any public investments made by the

Alaskan Permanent Fund are complementary to the private marketplace and supplement private capital because of the public benefit derived by the residents of the state. However, as we have already noted, such collaboration between public and private capital must be reasonable and fair on both sides.

"Equity" is essential to the creation of new enterprises and new technologies, as well as to the expansion of substantial, large-scale enterprises which are necessary to the diversification of Alaska's renewable and nonrenewable resources.

"Debt and Debt Guarantees" are the modes of investment most necessary to collaborative support with commercial banks, savings banks and credit unions in increasing the availability of intermediate and long-term expansion capital to medium- and small-sized enterprises.

3. Investment in Community Development

Section 40 (3) provides that "The Permanent Fund May Invest Not More Than 30 Percent of Its Resources in Financing a Reasonable Proportion of the Longer-Term Investment Capital Needs for Community Development Projects of Municipalities and Public Corporate Entities and Private Dwellings in Alaska for Which Sufficient Financing is Not Available from Other Sources on Reasonable Terms. These Investments May Take the Form of Debt or Debt Guarantees."

Again, I want to amplify the meaning and corroborate the soundness of underlined phrases in light of regional and community economic development experience in the United States, Canada, Europe, and Third World countries.

"Not More Than 30 Percent" is an important limitation for two reasons, which my own work in community economic development has often made painfully clear: First, community development finance is very high-risk investment activity. Second, there is a serious problem in finding a sufficient deal flow of projects which are sound both financially and in terms of their community economic impact. Part of this is a market problem and part is a management problem. Low-income areas, by definition, have a more limited capability to support economic activity. Therefore, heavy emphasis should be placed on the development of community projects with a strong export market, which generate stable, steady jobs in the local community by importing sales revenues from outside the community. Finding adequate managerial talent is a far greater impediment to community economic development than finding adequate capital. The Permanent Fund has the tough responsibility of ensuring that community development projects are adequately managed as well as adequately funded. It must help mobilize that management capability as well as capital.

"Reasonable Proportion" is also a phrase with particular

importance to community development activities. First of all, it suggests that in every instance the Permanent Fund should be joint venturing either with a municipality or with a regional or local community development corporation or cooperative which would put up a significant amount of the financing. I have already noted Alaska's unique opportunity to co-venture with regional corporations.

It also suggests joint ventures with private entrepreneurs. Some of the most successful community development efforts in the lower 48 today involve creative financial and managerial collaboration between community development corporations and private investors--the Kentucky Highlands Investment Corporation, the Delta Foundation, Harlem Commonwealth Council, and Bedford-Stuyvesant Restoration Corporation. All of these models and the history of their experience deserve the careful attention of the legislature in designing the Permanent Fund's community development investment structure.

<u>"Longer-Term Investment Capital"</u>, or "patient money," is essential for successful community development projects. The need for extensive managerial assistance, for developing markets over a long term, for infrastructure investment, all add to the cost and to the time frame over which community development projects are likely to have a profitable payout. Often, the private market

is willing to put up the short- and intermediate-term financing if municipalities, public community development corporations and the Permanent Fund provide sufficient longer-term equity and debt financing.

"Community Development Projects" would (based on the experience of community development organizations in the United States and overseas) encompass at least three major categories of activity: export industry, local commercial and housing services, and social overhead capital and infrastructure development. To the extent that the Permanent Fund participates in any of these three areas of activity, it must meet its essential goal of investing only in income-producing projects.

In the case of social overhead capital and infrastructure development, a subsidy will be necessary either from the General Fund or from a local municipality or public community development corporation.

Similarly, commercial and housing services essential to local community development will also be somewhat precarious in terms of the capability of developing a substantial cash flow, given the relatively low income of the local service area. In order to put together a sound overall package, it may be necessary for Permanent Fund investments to be paired with subsidized grants from the General Fund or from local municipalities.

Only in the case of export industry, in which local residents are employed in enterprises which sell to a "foreign" market outside the local area, is the likelihood of a strong, income-producing investment most assured.

"Municipalities" are essential co-venturers with the Permanent Fund where social overhead capital and infrastructure investments are required.

"Public Corporate Entities" I take to include regional and local development corporations and cooperatives.

"Private Dwellings" has a strange ring. The implication seems to be that individual local businesses are excluded from direct financing by the Permanent Fund for community development projects but local individual homeowners are not. Based on experience in the lower 48, serious consideration ought to be given to financing local housing development through a community development intermediary as well.

"Debt or Debt Guarantees": This is a serious flaw in the design of the Permanent Fund. The Permanent Fund should be free to make equity investments in community development, as well as in productive private enterprises. The experience of the most successful community development organizations in the United States confirms this judgment. The essential financial ingredient of successful CDCs is their ability to make equity investments

in enterprises in order to have adequate control and in order to ensure that they are soundly and patiently financed.

Alaska is in a somewhat exceptional position, with many substantially funded regional community development corporations which can take much of the equity position for community development projects on a joint venture basis with the Permanent Fund. Nevertheless, such pioneering state community development banks as the Massachusetts Community Development Finance Corporation, with their capacity for making equity investments in community development as well as for handling debt and debt guarantees, deserve careful consideration by the Alaskan Permanent Fund. This power need not be used frequently, but it is essential that it is available to the Permanent Fund.

B. What Should be the Legal Structure of the Alaskan Permanent Fund So That It is Most Equitable and Efficient in Carrying Out Its Goals, and Yet Accountable to the Executive and Legislature for Achieving Its Public Purposes?

We have already noted that the great virtue of development banks is their ability to operate at a relatively high level of efficiency and market sensitivity. This strength, however, is counterbalanced by the tendency of development banks to operate more conservatively than public policy may warrant and (sometimes)

to be designed with insufficient executive or legislative oversight. Care at this early stage in the design of the Alaskan Permanent Fund can help to ensure that the strengths of the Fund as a development bank are maintained while its weaknesses are minimized. I cannot emphasize too strongly the importance of integrating the Permanent Fund into an overall economic development plan. It is but one of many tools for achieving--and sustaining--a sound economy in Alaska.

Section 20 properly structures the Permanent Fund as "a public corporation of the state and an instrumentality of the state within the Department of Revenue that has a legal existence independent of and separate from the state. . . ." Section 90 "exempts" the Permanent Fund "from the provisions of the Executive Budget Act," Without knowing the particulars of the Executive Budget Act, I presume that this provision frees the Alaskan Permanent Fund board and staff to make decisions with regard to investing principal and whatever portion of income is necessary either for administrative overhead or for reserves without annual executive or legislative approval. Finally, Section 100 places "the president, officers, and staff of the Permanent Fund in the exempt service."

It is absolutely essential that the Permanent Fund, if it is to be efficient in carrying out its public purposes, be free to

hire the highest caliber professional staff at competetive world-wide market rates--free of the constraints of Civil Service and of either political or bureaucratic manipulation. Similarly, the policy board of the Permanent Fund must be able to reward its president and staff for successful performance according to market standards, and fire that president and staff at will. Placing the personnel in the exempt service is essential to sound operations. Similarly, placing the Permanent Fund "in but not of" the Department of Revenue and making it exempt from annual approval of its investment decisions is also essential to its efficiency, PROVIDED THAT there are careful controls built into the statute of the Permanent Fund which ensure complete annual reporting and review of the investment activities of the Permanent Fund by both the legislature and the executive. This annual reporting and review must include both the financial soundness of its investments and their economic impact, and provisions must be defined which ensure that the investment planning of the Permanent Fund is consistent both procedurally and substantively with the overall economic development planning of the state.

In this regard, I prefer the language of Section 60 (10) in HB-300 over the comparable language in HB-298. The policy board should be required by statute to "present a complete report of investment programs, plans, performance and policies to a joint

meeting of the Senate and House Finance Committees of the legislature within 30 days after the beginning of each session." It should not read merely "prepared to present."

The independent professional judgment that is essential to making tough investment decisions and the resulting market sensitivity of a well-structured public development bank such as the Alaskan Permanent Fund is, as I have noted, a conservatizing influence over time. It requires a more sophisticated form of accountability than simple financial accountability. Some form of dual accounting is called for. First, there must be simple accounting, according to conventional financial standards, of the ability of the Alaskan Permanent Fund to make prudent investments and receive an appropriate return on that investment. Because the Alaskan Permanent Fund is capitalized by a dedicated investment of public revenues, this public investment requires, however, an additional public measure of return on investment in terms of the external benefits to the economy as well as the internal rate of return to the development bank itself. Some of these external benefits can be measured as the fiscal return to the state in both reduced social overhead costs and increased tax revenues. There are serious technical problems in properly assigning both costs and benefits, but this is an area in which considerable pioneering is essential if we are to determine whether or not our

projections for the Fund's economic impact and financial soundness have in fact been met.

I suggest, therefore, that Section 150 be amended to provide for an annual report which accounts for economic impact as well as the financial soundness of investments made by the Permanent Fund. This economic impact accounting should incorporate operational principle number 8, which requires that "the Permanent Fund shall analyze the economic and other effects of an investment decision, by including the effects on employment, income distribution, environment, health, social and other factors.

The Inter-American Development Bank and the World Bank have developed techniques of cost-benefit analysis which have some limited applicability to Alaska and which are summarized in most useful detail in "The Appraisal of Development Projects: A Practical Guide to Project Analysis with Case Studies and Solutions," by Roemer and Stern. It should be recognized, however, that because the Alaskan economy is part of the wide open and fluid American economy, it will be much more difficult to isolate the costs and benefits of Permanent Fund investments. For better or worse, unlike Zaire or India, Alaska does not have its own currency or tariff laws.

More appropriate to your purposes are some of the techniques now being pioneered in Massachusetts with the Community Development

Finance Corporation, in which all investment decisions and all auditing of those investment decisions are made on a two-track line of analysis: the first track includes traditional projections and accounting for financial soundness; the second track includes projections for economic soundness. In this system, the staff must report to the investment board its projections of primary and secondary employment and fiscal benefits at the same time that it reports its projections for financial viability. The investment review board must then specifically find that the project meets standards of both economic and financial soundness. The monthly, quarterly and annual reporting of any enterprise financed must also note whether both sets of projections have or have not been met. In turn, the annual reporting of the Community Development Finance Corporation to the executive, legislature and public must account for the performance of its investments on both tracks.

I want to reemphasize that the techniques for economic impact accounting have not been well developed, but that is all the more reason for us to make a commitment to improve the sophistication of those techniques given the awesome financial responsibility in undertaking such projects as the Alaskan Permanent Fund. I would be happy to share with you in more detail some of the standards and procedures which are now being developed.

Two other forms of public accountability deserve further

consideration by the Alaskan Permanent Fund committee--provisions in keeping with the movement toward both "sunshine" and "sunset" laws.

Sunshine Provisions: Section 190, which provides for public access to information, does not yet properly articulate, in either draft, the appropriate boundaries for "sunshine" on the one hand, and for confidentiality and discretion on the other. Two matters require the utmost confidentiality: the financial records of an individual private enterprise, and the personnel actions of the Permanent Fund itself. Those matters should be dealt with in executive session and in full confidentiality regarding individual records. All other policy actions of the investment board should be taken in public meetings of which a public record is available. The results of individual financial reviews and personnel actions must be available in summary form to the public--including the basic terms of any financial arrangements that are concluded.

Sunset Provisions: While these are, in principle, a good means of holding public development banks accountable for their actions, they present certain practical problems, in that development banks by their very nature are investing assets and creating liabilities which will not mature until perhaps twenty or thirty years into the future. This is not an insurmountable

problem; the sun of the Federal Reconstruction Finance Corporation (RFC) set in 1958, at which time its assets and liabilities were assumed by the Small Business Administration. Nevertheless, I suggest not a predetermined "sunset" date for terminating the Alaskan Permanent Fund, but rather what I would call a "high noon" provision.

The "High Noon" Provision: After the Permanent Fund has had a chance to get off to a good, strong start--say, after an interval of ten years--at its high noon of financial and economic activity, I suggest that it be subject to a fundamental review by a joint executive and legislative commission in order to determine whether or not its performance equalled its promise. The establishment of such a commission should, at the end of nine and a half years of activity, be required by statute now. The commission should be required to report to the executive and legislature on the tenth year anniversary of the Permanent Fund. Included in the commission's findings would be recommendations for the continuation of the Permanent Fund, subject to various modifications, or its termination.

Accountability to Local Communities: This is a sensitive issue, handled differently by different states, depending on the history and custom of different jurisdictions. Massachusetts, for instance, has a three-hundred-year history of strong local

home rule which requires virtually all state actions to be locally approved. Connecticut has precisely the opposite tradition.

The language of the Permanent Fund bills seems to make three implicit distinctions:

Because the Permanent Fund can only finance a "reasonable proportion" of community development projects, there seems to be an implication that there must be a municipal or regional or local development corporation sponsor.

Section 130 (3) specifies that the Permanent Fund generally "shall be sensitive to the views of affected local communities . . ." and specifically "shall include an analysis of those views in proposals for large investments." The implication is that investments in medium and small "productive private enterprises" need not bear such an analysis. The key questions are: What is "large"? And, do these phrases reflect Alaskan state-local custom?

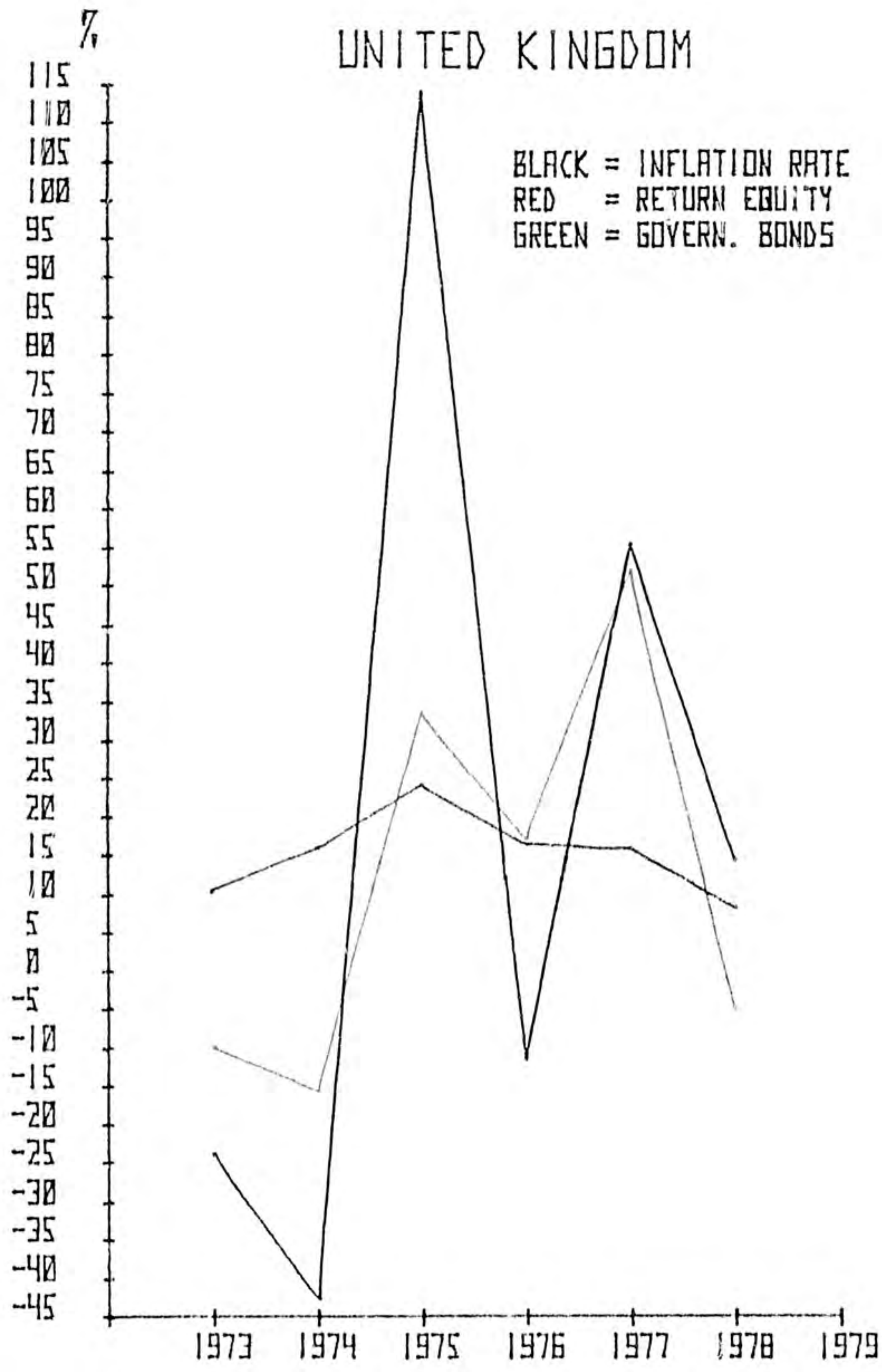
C. What Board and Staff Management Structure is Most Efficient for Carrying Out These Goals?

Generally speaking, I find the structure and responsibilities of the Permanent Fund policy board, the investment committee and the president to reflect appropriate international, national and state development banking experience.

In the above section on legal organization and accountability, I have already noted the critical importance of establishing the managerial independence of both the boards and staff of the Permanent Fund so that they are able to produce according to market standards and to be independent from daily political or bureaucratic interference.

Structure of the Permanent Fund policy board (Section 50): The structure of the Permanent Fund policy board is good. It is small enough to be effective and yet large enough to represent a balance of interests. The two/seven balance between members of the executive and public members is good. The public members should be "confirmed by the legislature in joint session," in the manner of advice and consent for major executive positions in the federal government.

If the Alaskan governor serves a four-year term, the consequence of staggered four-year terms for the seven public members is to give an incumbent governor assured control of the board during the third year of his or her term, subject of course to legislative confirmation. This arrangement has both advantages and drawbacks. If the Permanent Fund is to be an integral part of an overall development plan for the Alaskan economy there must be some mechanism by which the president and the policy board are a part of that planning process and operate within an overall development plan. On the other hand, the efficiency of the



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UNITED KINGDOM
BLACK = INFLATION RATE
RED = RETURN EQUITY
GREEN = GOVERN. BONDS
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1973
1974
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1977
1978
1979

NOTES ON PURPOSES, ORGANIZATION, MANAGEMENT AND REPORTING PROPOSALS IN HCS SB 161

PURPOSES

- Establish a means for legislative oversight of state lending and investment functions.

- Establish the Alaska Permanent Fund Corporation to invest and manage the principal assets of the Alaska Permanent Fund.

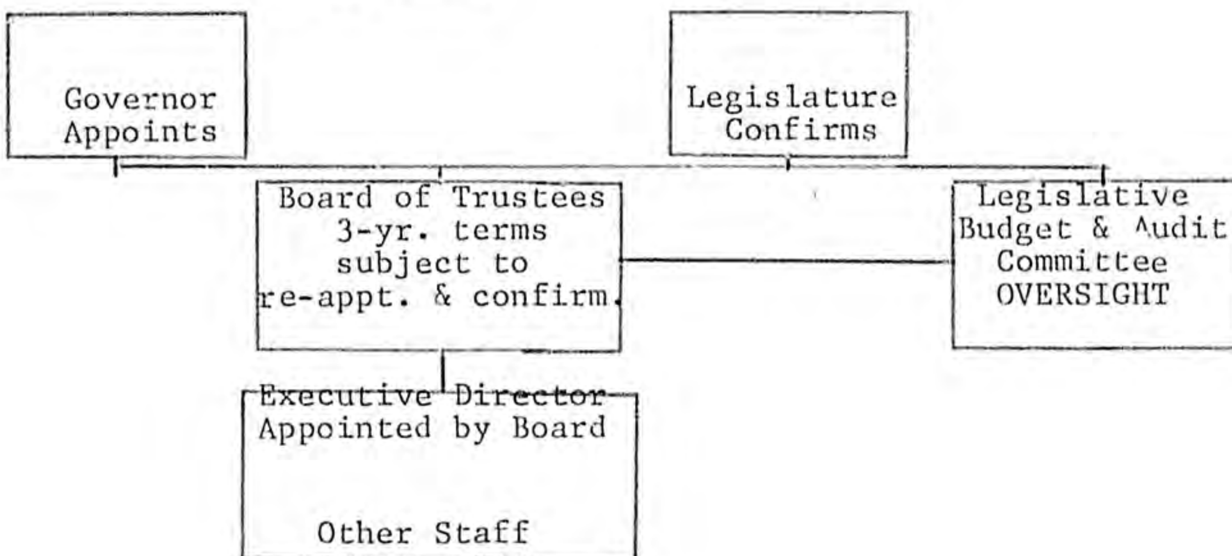
- A separate fund consisting of certain state mineral revenues.

- Used for income-producing investments which may include in-state investments that have a risk level and expected yield comparable to specified alternative investment opportunities and consistent with the prudent-man rule.

- Permanent: "1. Fixed and changeless; lasting or meant to last indefinitely" (Source: The American Heritage Dictionary of the English Language, 1970). "1. Lasting or intended to last indefinitely without change; continuing in the same state or in the same place, stable, durable, abiding." (Source: Webster's New Universal Dictionary of th English Language, 1976).

- Accumulate sufficient income in the Fund to allow diversification of Alaska's economy and to insure that future generations receive benefits from development of the State's nonrenewable resources (Source: Joint Chairman's Report on CS SSHJR 39, March 24, 1976).

ORGANIZATION STRUCTURE



MANAGEMENT

- Policy decisions about permissible categories of investment would be made by the Legislature and included in statute.
- Decisions about trustee appointments would be made by Governor and Legislature.
- Operating decisions about the performance evaluation of the Corporation would be made by the Legislative Budget and Audit Committee.
- Operating decisions about the specific investments of Permanent Fund principal would be made by the Corporation staff, under direction of the Corporation Board.

REPORTING

- Alaska Permanent Fund Corporation (APFC) Board to submit quarterly and long-range investment reports to Legislative Budget and Audit Committee (LBAC).
- APFC Board to submit annual report to Governor, Legislature and the public.
- LBAC to report annually to the Legislature with recommendations for any needed legislation.
- Governor to report annually to the LBAC on capitalization levels and investment policies.

P. B. McDowell
March 20, 1980

Alaska House of Representatives

HUGH MALONE

POUCH V
JUNEAU
99801

P. O. BOX 9
KENAI
99611

Dear Fellow Legislator:

Attached find two short executive summaries of reports prepared for the Department of Revenue. The authors, Drs. Coffman and Fry, spoke before the Permanent Fund Free Conference Committee on March 17 on their findings concerning capital shortages in rural Alaska. I hope that you will take the time to read through the papers and think about their implications.

Sincerely,

Hugh Malone

C 200

March 1980

CAPITAL SHORTAGE IN RURAL ALASKA

CONCEPTUAL ISSUES

Richard B. Coffman
City University of New York
and
Washington State University

-Draft-

I. Introduction and Recommendations

The main questions addressed in our study were:

1. Have imperfections in private capital markets caused a capital shortage in rural Alaska?

2. Have governmental policies caused a capital shortage in rural Alaska?

Our answers are:

To 1, yes. There is above average concentration in the banking industry in Alaska, which appears to have led to above average spreads between banks' deposit and lending notes of interest, and to less lending than would be found in a competitive market. However, this appears to be a state-wide problem, rather than one facing just rural Alaska.

To 2, yes. The State of Alaska has a number of policies which contribute to capital shortages. There are (a) state usury and loan interest ceilings, (b) the gross receipts tax on banks, (c) reserve requirements for state chartered banks, and (d) the many state loan programs.

These answers lead us to a third question:

3. What can be done to improve the functioning of Alaska's capital markets, and what role should the state budget surplus and the Permanent Fund play in the improvement process?

Our answer is that the state has the power to do a great deal to improve Alaska's capital markets. We suggest the state consider:

(a) abolishing all interest rate ceilings;

(b) abolishing the gross receipts tax;

(c) abolishing the 20% reserve requirement for state banks;

(d) passing a new Small Loan Act;

(e) abolishing all state loan programs.

We believe these actions would bring capital market efficiency in Alaska at least up to the national average, and perhaps beyond. We thus see no economic reason for the state to be involved in the loan business, and no need to view the

state budget surplus and the Permanent Fund earnings as pools of loanable funds. We thus suggest:

(f) that the budget surplus, for the most part, be distributed to Alaskans;

(g) that the Permanent Fund be managed to maximize the yield of its portfolio.

We further suggest that:

(h) the state subsidize people, not capital if the true concern is income and wealth distribution in rural Alaska;

(i) the state subsidize houses, not mortgages if the real issue is a socially unacceptable standard of housing in rural Alaska;

(j) the state Business Loan Program be evaluated;

(k) if the Alaska Housing Finance Corporation stays in existence it be required to promote innovative lending by buying price level adjusted and graduated payment mortgages;

(l) the state substitute a consumption tax for the income tax, effectively reducing the Federal income tax burden on Alaskans.

II. Conceptual Issues in the Capital Shortage Problem

We will now turn to an explanation of our conclusions and recommendations. First, I will discuss conceptual issues. Next, Dr. Fry will report on our empirical study of Alaska's capital markets. The conceptual issues are as follows.

Some basic terms must be defined. First, there is a distinction between real capital and financial capital. Second, capital can be considered as either a stock or a flow. A major distinction is between positive (market, economic) shortages or capital, which are defined in terms of the workings of free, efficient markets, and normative (social) shortages of capital, which are defined with reference to individual and group norms and values.

We will begin with the concept of a well functioning market. This is a market of many borrowers and lenders, none of whom have any power over terms and conditions of

loans. Equilibrium of supply and demand in this market will determine the interest rate and the amount of capital loaned and borrowed. This result will be economically efficient.

A positive (market, economic) shortage of capital is defined as an amount of capital less than would be found in a well functioning market. There are many potential causes of such capital shortages. These include:

1. temporary shortages due to changes in market supply and demand. In a free market the interest rate will soon adjust to eliminate such shortages.

2. permanent shortages due to interest rate ceilings. Interest rate ceilings make it illegal for interest rates to rise to eliminate shortages and thus can perpetuate shortages.

3. shortages due to monopoly power. A monopolist will find it in his interest to restrict lending and raise interest rates.

4. shortages due to the nature of infrastructure capital. Private capital markets will generally produce too little infrastructure capital because private investors cannot capture the wide spread public benefits produced.

5. shortages due to government created risk and uncertainty. Too little capital may be produced as private investors react to uncertainty about future taxes, regulations, and restrictions.

6. shortages due to taxes and regulation. Taxes and regulation which raise the costs of lending will tend to reduce the amount of lending and capital formation.

7. shortages due to lack of market mechanisms to deal with risk. If firms cannot insure against various types of risk, they will reduce the amount of investment undertaken.

This concludes our list of varieties of positive shortages. We now turn to the concept of normative shortage. The normative (or social) shortage is generally defined in terms of perceived "needs". If less capital than "needed" is produced by the market, then a shortage is perceived by those who have defined the needs. The needs concept is criticized by economists because (a) it is subjective, and the perception of needs varies from person to person, (b) it

ignores overall resource constraints, and (c) it ignores costs.

There are many potential sources of perceived normative shortages. These include:

1. shortages due to differences in borrower characteristics. Capital markets will discriminate among borrowers on the basis of amount of collateral and equity, evidence of business ability, and credit history. Those discriminated against may perceive a shortage of capital.

2. shortages due to transactions and information cost differences among borrowers. Capital markets will discriminate against borrowers presenting high information and transaction costs. Those discriminated against may perceive capital shortages.

3. shortages of capital confused with shortages of income. People who are poor lack capital among many other things. However, their basic lack is one of income and wealth, and giving them more capital is only one way to increase their income and wealth.

4. a shortage of capital confused with a shortage of work. Those who stand to benefit from large scale construction projects - workers, suppliers, transporters - often see a lack of such projects, and characterize this as a capital shortage. However, there is no economic shortage here unless there are available benefits which would generate net benefits.

5. a capital shortage confused with a shortage of subsidies. Government loan programs which offer subsidized interest rates or loose credit tests will face many eager demanders. But there will always be too few subsidies to meet this demand. Further, as government terms and conditions become seen as the norm, people will start to believe there is a shortage of private capital on reasonable terms.

This concludes our listing of varieties of normative shortages.

III. General Policy Considerations

Our specific policy suggestions have already been listed, and will be discussed in more detail in Dr. Fry's presentation. However, here at the end of this discussion on conceptual issues some general comments on policy are in order.

First, when positive capital shortages are found "the cure should fit the disease". That is, if a capital shortage has a specific cause then that cause should be attached directly. Unfortunately, though, government has a tendency to discover a problem, then pick a solution which expands the size of government and its role in the economy, whether or not that is the best solution. If capital shortages in Alaska are due to government policies, then the best solution is to alter those policies, not to get the government more deeply into the lending business.

Second, many attempts have been made by governments around the world to stimulate economic development by subsidizing capital in particular, and private enterprise in general. Unfortunately, many of their policies have had the unintended result of destroying profit-seeking, market oriented firms, and of creating in their place subsidy-maximizing firms. The subsidy-seeking firms will produce anything, anyway, anywhere, so long as it gains them a subsidy. When the subsidies end, these firms fade away, and it is discovered that no viable economic base has been created, despite all the resources used up and all the activity undertaken.

March 1980

INVESTMENT CAPITAL IN RURAL ALASKA

MAXWELL J. FRY

University of Hawaii

SUMMARY

1. Findings

(a) There is no evidence of any economic shortage of physical capital in rural Alaska.

Were there an economic shortage of physical capital in rural Alaska, then unexploited investment opportunities which would yield above-market returns must exist. The current perception of residents of rural Alaska and outside observers is that profitable investment opportunities are lacking in rural Alaska. We have found no evidence to contradict this view.

The best indication that unexploited profitable investment opportunities are not abundant in rural Alaska comes from the performance of the ANCSA (Alaska Native Claims Settlement Act) regional and village corporations. The conclusion must be reached that the 12 regional corporations and 205 village corporations have failed to locate unexploited profitable investment opportunities in rural Alaska. Corroborative evidence is also provided by the Small Business Administration's (SBA) activities in rural Alaska.

Rural Alaska has not witnessed rapid economic growth precisely because of the lack of profitable investment opportunities. Apart from the census division of Barrow, above-average population growth during the 1970s has occurred only

in Alaska's urban and contiguous rural areas, i.e. Haines, Matanuska-Susitna, Seward and Valdez-Chit-Whittier.

(b) Rural Alaskans may not be able to borrow as much as urban Alaskans because they have less wealth.

White families in the United States possess three to four times more net wealth than minority families at any given level of income. If urban and rural Alaskans hold the same proportion of their wealth in the form of deposits, the deposit holding differences will reflect differences in wealth.

Excluding public bank deposits, deposits of all kinds (bank, S & L and credit union) averaged \$5,910 per urban Alaskan and \$2,082 per rural Alaskan in 1977. However, this difference needs to be interpreted with considerable caution. For one thing, there is a substantial volume of banking by mail. The United Bank of Alaska claims that 65 per cent of its accounts are mail accounts. Furthermore, many Alaskans are known to bank out-of-state, particularly in Seattle.

Nevertheless, this three-to-one difference is consistent with the hypothesis that urban Alaskans may well possess three times the wealth of rural Alaskans at similar levels of income. The further implication about differential borrowing abilities is clear. Rural Alaskans may be able to borrow only one third as much as urban Alaskans, since ability to borrow is limited by the borrower's own equity in the prospective project.

(c) There is no evidence that financial institutions discriminate against rural Alaskans.

One can certainly live further from a bank in rural Alaska than would be possible anywhere else in the United States. Nevertheless, population per bank branch is not substantially higher in rural than it is in urban Alaska. Furthermore, the population per bank branch in rural Alaska of 3,609 is considerably lower than it is for the United States as a whole - 5,062. Even in states permitting statewide branching, as does Alaska, there are 4,868 persons per bank branch. Total per capita deposits in rural Alaska are only 37 per cent of the value of per capita deposits in urban Alaska. Deposits per rural branch are 47 per cent of deposits per urban branch. On these bases, Alaska has an above-average supply of bank branches even in its rural areas.

Economies of scale exist in the banking industry. Hence, unit costs of banking should be higher for rural than for urban branches of Alaska's financial institutions, since rural branches are much smaller than urban branches. These higher unit costs might be met in four ways: (a) Lower deposit rates of interest and higher service charges; (b) Higher loan rates of interest; (c) Fewer banking services; (d) Lower profits.

Deposit rates of interest, even on large certificates of deposit, and service charges are uniform across all bank branches in Alaska. Loan rates are not differentiated on a regional basis, nor are the credit standards applied to loan applicants.

Rural branches offer fewer services than urban branches. However, the branch banking system enables all clients to obtain specialised help and consideration - impersonally and with some delay - from head office. This solution is evidently viewed as a poor substitute for personal contact and local decision making autonomy.

It seems that rural branches are indeed less profitable than urban branches. This conclusion was corroborated by bankers interviewed during this study. For example, it was claimed that the National Bank of Alaska could never build its existing branch network if it had to start from scratch again today.

It was alleged by various interviewees that bank branches simply sucked deposits out of rural Alaska to Anchorage. Loan distribution data are unavailable. However, the Community Reinvestment Act of 1977 obliges regulated financial institutions to service the credit needs of the communities in which they are chartered to do business. Federal financial supervisory agencies are required to enforce this law. Responses from the Comptroller of the Currency, the Federal Deposit Insurance Corporation and the Federal Home Loan Bank Board indicated that all regulated financial institutions in Alaska had complied with the Act.

In conclusion, we could find no evidence that private sector financial institutions in Alaska discriminated against residents of rural areas.

(d) Government creates capital shortage in rural Alaska through subsidised credit.

There is a plethora of subsidised loan programmes in Alaska. The interest rate is deliberately set at a rate below the market equilibrium. Demand therefore exceeds supply and there is unsatisfied demand. Those who are not satisfied may rationally prefer to wait in the hope of a subsidy in the future rather than borrow now at market rates of interest. Subsidised credit programmes create their own economic capital shortage - there is always a shortage of gifts.

To the extent that greater subsidies have been given to rural borrowers, there is a greater capital shortage in rural than in urban Alaska. Capital shortage created in this way can be eliminated completely simply by bolishing the subsidised credit programmes. The only other way it to meet all loan demands at the subsidised rate. This necessarily involves eliminating all private supply of capital in Alaska.

(e) Government lending replaces private lending in rural Alaska.

Unsubsidised state lending supplants an equal volume of private lending. In this case, the interest rate on state loans is the same as the rate on private sector loans. Therefore, total demand for loans will be unaffected by the introduction of a state loan programme. If a borrower chooses the state programme, the state must in turn borrow the funds with which to

supply the loan. The increased demand for funds by the state is offset exactly by the decreased demand by the private sector financial intermediaries. Hence, aggregate demand remains unchanged here too. With no change in direct and derived demand for funds, the quantity supplied, i.e. aggregate saving, will be unaffected too. If the pool of saving remains unchanged, an increase in state lending to finance investment must be exactly offset by a decrease in private lending to finance investment, since saving equals investment.

This crowding in by state lending programmes will not be complete if state lending is subsidised. In this case, there will be an overall increase in saving and investment. The tax exemption of interest on bonds sold to finance state lending programmes is a subsidy illustrating this point. For example, the AHFC can sell tax exempt bonds and lend on these funds in the form of mortgages at below market rates of interest. As a result, the aggregate quantity of loans demanded increases. To be sure, this raises the market rate of interest so that the tax exemption is financed in part by all other borrowers. The main point here, however, is that the higher market rate of interest elicits an increase in the quantity supplied, i.e. in saving. Hence, both saving and investment rise.

It is not just economic theorising which provides these results. As part of this study, borrowers from the State Business Loan Program were surveyed. Of those borrowers who had approached a private sector institution before obtaining a

loan from the State's programme, only one was actually denied a loan elsewhere. Seventy-eight per cent of these borrowers simply preferred the lower interest rate charged by the State.

The rapid expansion of public sector lending in Alaska has thwarted growth of the private sector financial institutions. Since there are economies of scale in financial intermediation, state lending has kept the private financial institutions' unit operating costs higher than they otherwise would have been.

(f) Regulation causes capital shortage in rural Alaska.

Reserve requirements for state chartered banks, the franchise tax, interest rate ceilings, selective credit policies, and the Small Loan Act hold financial intermediation in both urban and rural Alaska below its optimal level, inhibits innovative lending which is essential in today's inflationary climate, and produces an economic shortage of financial capital, particularly of the high interest, high risk variety.

Below equilibrium institutional interest rates hold financial intermediation between savers and investors below its optimal level. Higher real institutional interest rates increase incentives to save and to invest, and also raise the average efficiency of investment. This is so because financial intermediaries raise real returns to savers and, at the same time, lower real costs to investors by accommodating liquidity preference, reducing risk through diversification, reaping economies of scale in lending, increasing operational efficiency and

lowering information costs to both savers and investors through specialisation and division of labour. When real institutional interest rates rise, disintermediation falls and financial intermediaries can use their expertise to allocate more efficiently the larger volume of investible funds which is then forthcoming.

2. Recommendations

(a) Subsidise people not commodities if the true concern is income and wealth distribution in rural Alaska (p.19).

(b) Subsidise houses not mortgages if the real issue is a socially unacceptable standard of housing in rural Alaska (pp.17-19, 29).

(c) Repeal the usury law, Small Loan Act, franchise tax and reserve requirements. Allow finance companies to accept deposits (pp.60-74).

(d) Abolish state lending programmes and selective credit policies (pp.63-70).

(e) If the Alaska Housing Finance Corporation stays in existence, require it to promote innovative lending by buying

price level adjusted and graduated payment mortgages (p.88).

(f) Evaluate the State Business Loan Program (p.90).

(g) Relieve Alaskans of federal tax on their saving, thereby effectively substituting a consumption tax for the present income tax. Should the state wish to encourage savings to stay in Alaska, the deduction and tax credit for federal tax on saving could, at some loss of welfare, be restricted to saving kept in Alaska (p.94).

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Committees

Alaska House of Representatives

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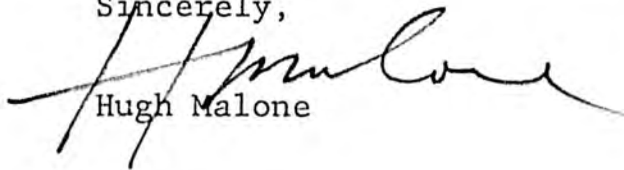

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consultants

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7 February 1980

Dear Borrower,

I am conducting a small study of the State's Business Loan Program for the Department of Revenue. The objectives are to find out how successful this program has been and what changes would improve it.

Your assistance would be of great value and much appreciated. Please would you help by completing and returning the enclosed questionnaire in the stamped addressed envelope provided. It should not take more than a few minutes and will be an important input in the process of improving this program.

Thank you very much in advance.

Yours sincerely,

Maxwell J. Fry

BUSINESS LOAN PROGRAM QUESTIONNAIRE

1. How did you get to know about this program?

   2 ☐ Advertisement
   3 ☐ Bank or other financial institution (e.g S&L association)
   5 ☐ Friend or acquaintance
   7 ☐ Business associate
   ☐ Other - Please specify ______

2. Did you apply for your loan from this program after you had looked into other possibilities for borrowing?

   9 ☐ Yes - If so, why did you choose this program?
   8 ☐ No
   - 1 ☐ Turned down elsewhere
   - 7 ☐ Interest rate too high elsewhere
   - 1 ☐ Other - Please specify [Paperwork for SBA loan]

   (Please continue on back)

3. What was the main problem (if any) in getting your loan from this program?

   9 ☐ Paper work for the application
   1 ☐ Raising the necessary downpayment
   1 ☐ Providing collateral acceptable to the lender
   4 ☐ Other - Please specify [No state funds available; incompetent loan officer; time delay]

4. How has your loan affected your business?

   12 ☐ Greatly helped
   4 ☐ Helped
   1 ☐ Made no difference
   ☐ Hindered
   ☐ Greatly hindered
   ☐ Other - Please specify ______

5. Did you have any new business with a bank or other financial institution as a result of this loan?

   10 ☐ No
   2 ☐ Opened a new account
   3 ☐ Got another loan
   1 ☐ Opened a new account and got another loan
   1 ☐ Other - Please specify [Bank released first mortgage and took a second mortgage]

6. Is the interest rate charged on your loan from this program satisfactory?

   16 ☐ Yes
   1 ☐ No - Please indicate the problem [Still too high]

7. How could the Business Loan Program be improved in your opinion?

   3 [Need low interest rate loans for working capital]
   1 [Need assistance with application]
   1 [Need more personal contact, less paperwork]

8. Do you have any other comments?

   4 [Loan officer was incompetent]
   1 [Maximum loan too small]
   4 [Processing time far too long]

PLEASE CONTINUE ANSWERS ON BACK IF NECESSARY