CITATION

Mr. Chancellor, I have the honour to present for the degree of Doctor of Science, honoris causa, HARVEY REGINALD Mac-MILLAN, whose career has been built on great energy, clear intelligence, strong judgment, a Scot's faith in the value of sound learning, and a profound belief in his country and its economic development. In presenting this pre-eminent forester and industrialist, the Senate pays tribute to his brilliance as a student and practitioner of the applied sciences, a brilliance which would have guaranteed him equal distinction in the teaching profession had he chosen, when tempted, to adorn it.

CONGREGATION ADDRESS

of Mr. H. R. MacMillan

MAY 12, 1950

Mr. Chancellor, Mr. President, distinguished guests, fellow graduates, ladies and gentlemen:

Your having graduated to this stage has proved your ability to overcome obstacles and solve problems. I congratulate you upon your accomplishments, and am confident that you will meet successfully the challenges that lie ahead of you in finding a useful place in society.

The first problem for many of you will be to sell your services. We older persons here hope all of you will remain in the Province that has done so much for you. Your modern outlook, trained abilities and vitality are needed in the development of British Columbia.

I hear that for some of you jobs to your liking are not easy to find. Possibly the time has arrived when only the lower rungs of the ladder are within reach of some of those seeking employment. If so, it may be a good idea to seek to enter some field of effort at the bottom, in the spirit of taking a post graduate course. For many years students have done this. Mining engineers have started in mines as labourers, and doctors as internes, relying upon natural endowments and superior qualifications to make themselves known as assets, and thus work toward the top. Many have found that the lowest rungs are the firmest base from which to reach the top. There are, in my opinion, more opportunities now in this province than at any time since I arrived as a \$75.00 per month combination compassman and cruiser over 43 years ago.

It can be expected that your educational advantages and the characteristics that led you to bring your training to this stage, will make you a leader of thought in a circle that will widen with the years. Therefore, it will not be long before your influence will be felt.

There is plenty to think about in the community you are entering. For the purposes of this talk my remarks will be restricted to a limited but important aspect of our provincial life. In my deductions I shall be undoubtedly partly wrong. My intent is to stimulate thought and discussion in the spirit of General Eisenhower who said recently, "Only an informed public opinion can win the peace." Similarly only an informed public opinion can maintain British Columbia's economic health. If there is to be an informed public opinion there must be public discussion.

Our population history reveals an interesting trend. White settlement began here in the early 1800's. The only products that

would then pay transportation costs to market were furs and placer gold. By 1871 the population of B.C. was 37,000 (about 10,000 whites). At that time industry had started in the south coastal area—chiefly sawmilling, mining and fishing. By 1881 the population was 49,500, a little over 1% of the Canadian total. Thereafter every decade to the present time showed B.C. to have grown in population more rapidly than Canada as a whole, reaching in 1949 about 1,140,000—over 8% of Canada. This great growth of population occurred in spite of the lack of wide areas of rich arable land, such as drew waves of immigration to the prairies between 1890 and 1920.

British Columbia is the only Canadian province in which industry preceded agriculture as the chief stimulus to growth. The land here was costly to clear. Nothing less than heavy machinery and power backed by capital could cope with the geography and the nature of the resources. People came here in numbers only when capital and management together, in small or large units, arrived to convert to a form saleable in other provinces and countries the accumulated raw resources of the fisheries, forests, and mines. The jobs so provided made the West Coast a mecca from the 1890's to the present time, providing a livelihood not only for the primary workers themselves but also for the great superstructure of merchants, professional men, government servants and other necessary service occupations. This activity gave local markets for the farmers who slowly and laboriously cleared and equipped their farms.

It is clear that without capital in large volume the fisheries, forests, mines and fields of this rugged province, could neither have been converted to the use of mankind nor have been made the sure source of basic income for over one million people.

1938 became the starting year for our greatest boom, which arose from the fact that our chief products—building materials, pulp, paper, base metals and food became necessities for war preparations, for fighting the war and for postwar reconstruction of people and things.

Therefore, stimulated by outside conditions, beyond our control, prosperity has rained continuously upon our Province to a degree beyond the most optimistic expectations. At times a market break has seemed to be in the offing, but before any check became apparent the overall demand for the sum total of our products swept onward and upward. Though experience tells us this will not go on forever, no one can say when an adverse change may begin, sufficient to halt the present rate of productivity, upon which our edifice of personal and public spending is erected. Such a reverse may be months, it may even be years in coming. It does not seem possible that present price levels coupled with full demand for our products will be permanent. Nevertheless our capitalists,

full of faith in our province's future, are investing for greater output of better goods and seeking trained men and women.

During this boom there have been important changes in our provincial economy. Looking about us we see at the end of 1949:

Firstly: Our population has increased by over 300,000 since 1939. This is an increase of over 40%, which is over double the rate of Canada's increase during the same period. Of the 1,140,000 in British Columbia some 405,000 are gainfully employed. The Federal, Provincial and Municipal Governments directly employ approximately 42,500 or over 10% of those working. Probably another 5% are employed directly and indirectly by contractors on government construction works.

Secondly: On the average, the people of British Columbia enjoy, next to the people of Ontario, the highest material standard of living in Canada, the greatest number of motor cars, 'phones, radios, labour-saving devices and gadgets, per 1,000 persons of any provincial population. British Columbia has done well by its population.

Thirdly: We in this province consume a small fraction of what we produce, say about 25% over all, and likewise we produce very little of what we consume. Of all Canadians, we are farthest from self-sufficiency, and are to the greatest degree dependent upon outside markets and outside supplies. We are consequently, of all the people in Canada, the most interested in interchange of goods, interprovincial and international.

During the still-continuing 12-year boom, our outside markets have vastly changed. Great customers of old standing, such as China and Japan, are out of business on a large scale for the long future. The sterling countries, traditional continuous large volume buyers, are buying from us only limited quantities as compared with their pre-war habits.

The shift of British Columbia sales away from the sterling area has been abrupt and spectacular:

	′39		′49
Fish products	59%	to	8%
Forest products	34%	to	19%
Mineral products	18%	to	10%

Consequently, for the first time in her history, B.C. is more dependent on the \$ markets of the world than on the \pounds areas for her sales outside Canada.

Contrary to the experience of our whole trade history, B.C., selling 32% of her exports in the f market, is less dependent thereon than Canada which in '49 sold 35% of her total exports to f countries. We have made the switch from the f to the \$ markets more rapidly than Canada as a whole. For our purposes the \$ market is the U.S.A.

As our markets have become narrower, our prosperity has become more vulnerable. To quote lumber as an example, in past years in times of American building booms, we sold a high proportion of our output to the U.S.A. The American demand usually ended suddenly—but China, Japan, Australia and the U.K., in those days moving independently of the U.S. economy, continued their buying, thus providing alternative markets. Because of the economic and political troubles of these other customers, they no longer hold out the prospect of providing such a hedge when we may need it in the future.

Fourthly: The large revenues arising from war and postwar prosperity have made it easy for the voters, with no other course forcibly presented to them, to boost to dizzy heights their public spending. They have chosen at election time legislatures instructed and willing to use the public revenues in buying on a steadily increasing scale more generous services for the population. These services are good, useful, and comfortable—it is easy to understand why they are so popular and so effective politically.

The maintenance of government services imposes a serious load on the worker. In 1949 the average income for all Canadians—men, women and children, was \$918. During 1949, the Federal Government spent \$171 for every Canadian or 19% of that average income. The British Columbian Government spent \$90 for every resident of the Province or almost 10% additional of the income; and the City of Vancouver spent \$67 for every inhabitant of the City—almost 7% of the income.

These Governments raised the money to pay for these expenditures by taxing their constituents. The full burden of these taxes is not apparent from the above figures alone. The brunt of this burden is shouldered by those gainfully employed. In Canada (including men, women and children) 1 out of 2.7 persons has a job. It is estimated that the average British Columbian with a job in 1949 paid directly or indirectly, after allowing for duplications, about \$600 in taxes to all levels of government. In 1950, he will be paying even more.

Fifthly: The total personal income of the population of B.C. for 1949 has been estimated to be one billion 160 million dollars. Of this sum, it appears that at least 30% was consumed by costs of government—Federal, B.C. and Municipal. If Governments take 30% of our incomes to pay their expenses in a period of high prosperity, how much will they need in times of adversity? The demands upon government may be even greater in periods of adversity. Such is the theory of cyclical spending. In my opinion, this figure of 30% at the peak of prosperity is dangerous.

Let us take a look at the per capita current expenditures of three provincial governments—Ontario, the richest province in Canada, with a well diversified economy; Alberta, a young province of expanding prosperity; and British Columbia, a similarly young and rich province but at present slower to develop.

In 1938 on a per capita basis these governments spent as follows: Ontario \$23, Alberta \$27, and B.C. \$39. B.C. spent 70% more per capita than did Ontario in 1938 and 44% more than Alberta. Coming along to 1949, we find that Ontario spent \$49 per capita, Alberta \$51 and B.C. \$90. In 1949, B.C. spent 84% more per capita than Ontario and 76% more than Alberta. (The effects of inflation are the same in all provinces.) Somebody is wrong. If the B.C. policy is right, the other provinces are wrong. If the other provinces are right B.C. is wrong in a big way. Here is an opportunity for you to study what is good for your future and use your influence accordingly.

Sixthly: Our voters throughout the Province are infatuated with the pleasurable feeling of constantly flowing public money irrigating all constituencies. In spite of warnings from leading members of the government and the legislature, they have made it clear that their ideas favor larger, not smaller, government expenditures, particularly on gratifications that will ease today's personal problems and increase today's comforts. So emphatic is the electorate on this point, that in the recent budget the legislature cut the customary investments designed to produce crops for the future in order to find more money to spend on the perquisites of today. This was done when distributing the largest revenues on record. The axe fell on projects to increase or protect future provincial revenue and employment, such as the creation of future forests, building access trails or roads to encourage search for or to reach untapped resources. As far as the provincial economy is concerned, the view of the voter seems to be "after me the deluge."

If our public financial policies are wrong, it is the fault of the voters. If the policies are wrong, you will be here to face the unpleasant consequences. It seems that you have a dominant interest in leading the electorate to a more prudent use of public revenues. You may even have to help them learn the hard way that no society can ever take out more than it puts in.

Based upon the foregoing statements being reasonably correct, as I believe they are, one might fairly say that the chief problem confronting us British Columbians as a whole is not unrestrained public expenditures on health, not more public works, not more social services, until we reach the earning position where we are confident that we can sustain everything we start without starving fundamental necessities such as education. Our chief problem, as

I see it, is to improve and maintain a more dependable, and if possible, higher state of economic health for our Province; it will require determined management and effort, to maintain, even on their present scale, the many desirable and valuable services that have been established in a period of high prosperity in response to the demands expressed by our people at the polls.

This is where you come in. You come in to assist those now thinking and working to maintain our standards.

One can mention various possible contributions to the solution of our problem.

We might expand our population. It has been a widespread Canadian belief that an increase in population would decrease the per capita cost of services. It has not worked that way here. During the past decade our population in B.C. increased over 40%, but the per capita cost of provincial government services increased over 120%. Much of this increase in per capita costs is due to inflation throughout the country. I do not feel, however, that the experience of the last decade offers convincing evidence that a mere increase in population in itself would decrease the per capita burden of taxation. As our population increases we must guard against newcomers or other passengers from amongst us catching free rides on the social services paid for by the workers. You have learned that what is free to one person is paid for by others.

We have no great ready arable areas to which persons with little capital can come to create rapid production. Almost all immigration we might encourage requires the use of capital to create jobs, or is dependent upon more persons coming here with capital upon which they can retire. We will not continue to attract the necessary groups, employers and the retired, if their study of our provincial economy reveals to them the threat of taxes substantially higher than apparent in other places they can go, or higher costs of more onerous conditions. To increase the number of employees we must attract and create new employers. This suggestion is not entirely humorous—should there not be a department—or even a service club—devoted to the starting and cultivation of employers—those key people who are such important sources of taxes and other benefits to the public?

A first objective naturally is to increase the volume of production in British Columbia, of those goods we can sell. If experienced companies, with capital, can be induced to come here to do this, we shall all gain.

Compared with other under-developed regions, there are great opportunities here now, presented by our pulpwood supply, our water powers and the fact that one half million to one million tons of merchant ships come to our ports empty every month in the year. Other possibilities will be uncovered if we strive to find them.

The effect of the increase in freight rates in recent years has been to make it more costly for us in B.C. to sell our products in Eastern Canada. In the case of lumber, for example, Eastern Canada has, in effect, been moved over 20% further away from us by higher freight rates. At the same time our difficulties in selling in the Sterling Area have been increasing. Clearly we must concentrate on producing for the United States market.

Fortunately, the American market has been expanding rapidly. The population of ten Western states has jumped since 1940, from 20 million to 27 million. These customers are on the average only about one-third as far away as our Eastern Canadian customers, they are about three times as numerous and are richer and greater potential consumers of many of our products. Their economy is more complementary with ours than is that of Eastern Canada.

If British Columbians are to unite on a trade policy for their province, it should be on the objective of an easier entry for our goods into the United States. We should have specific plans and objectives such as lower tariffs and reduced restrictions for our canned sea products, fruit and farm crops, base metals, plywood, and a wider range of paper. To succeed in this direction would be the greatest function Ottawa could perform for us. Our plan should include a continued effort to educate the Americans to the benefits of trading on fair and friendly reciprocal terms with one of the few peoples in the world that seeks nothing more costly than an even break.

Concentration on the United States market becomes more urgent as the United States Government, through the Marshall Plan, continues to reduce its financing of Canadian exports to the United Kingdom. In the last nine months of 1948, 80% of Canadian exports to the United Kingdom were financed by the Marshall Plan, in 1949, 50%. The figure looks to be still lower for 1950.

Success in this direction will stimulate the use of our natural resources and increase the number of our workers. Also it could encourage the refining of our manufacturing processes to an end product of higher value—a policy which must continuously be our goal, in which trained men will be employed in greater proportion. We could improve our economy by applying to our rich resources trained minds and science as has been so notably done by the Swedes and Germans dealing with inferior natural advantages.

Britain's lack of dollars leads quickly to lower sales to the Sterling area of British Columbian lumber, pulp, paper, fish, apples, metals, and other commodities. In self defense we must help the Sterling area to earn dollars. This we can do by directing as much as is feasible of our purchasing to Sterling sources. We in the west are more directly interested in such a policy than the people of Eastern Canada.

The best use of our natural resources both as to volume, avoidance of waste, and working up to highest values, may lead to the creation of larger industrial units. Outstanding examples of such beneficent growth are the Consolidated Mining and Smelting Company and the larger companies in forest industries and fishing. Smaller organizations and smaller units could not maintain the research staffs without which new discoveries and savings would be overlooked. Smaller units could not achieve the low costs and higher recoveries, without which our chief products could not compete continuously in foreign markets. Large production units are more likely to be permanent, and to maintain more nearly an equilibrium of employment. They present greater opportunities for trained specialists and thus bring strength to British Columbia.

You and your successors are the great losers where we have failed in conservation. You are also the great beneficiaries of such successful conservation policies as now exist or may begin hereafter. First should come ideals of conservation, accepted by the voter, who if there is to be conservation must at least consent to a part of each year's revenues being invested now for future crops. Then there is still to develop on a higher and more educated level wise management and improvement of fisheries, forests, mines and agricultural lands, to support a growing population at the highest permanent standard of living. Conservation in this Province might include prolonging the life of developed natural resources by extending activities to forest and potential mineral areas in which there is now practically no industry. For instance, it is said that no important working mine has been discovered in British Columbia since 1896. Also it is possible that we can increase our earnings from the sea.

Now, it may occur to some of you, that I have dwelt over long on the problems and difficulties of our times in British Columbia. Let me assure you that I am optimistic and it is my wish to be encouraging—believe me, I am not a pessimist on the future of British Columbia. It is done in the spirit that if you take care of the liabilities the assets will take care of themselves. I suggest to you that if we temper our characteristic Western optimism with realism, we shall be better able to serve our own and the public interest than are those cheerful and agreeable souls who refuse to recognize a hard fact until it has them by the throat.

My message to you in the graduating class—and I urge its importance—is that, in leaving the University, you resolve to give to British Columbia as well as to receive from it. That you study her problems and work for their solution, and that you regard the public business as your business. That you examine carefully and critically those proposed solutions to public problems that emphasize the duty of the state to the individual rather than—what is much more important—the individual's responsibility to society and to himself.

Possibly you should not be satisfied that there are only two UBC graduates in the B.C. legislature.

If British Columbia's future measures up to her great potentialities, it will be proof that her men and women have not forgotten their responsibilities in an unseemly scramble for excessive security purchased by the state. The challenge is yours—to build upon the heritage of the past with courage, realism and unselfishness.

"Go to your work and be strong, halting not in your ways, Baulking the end half-won for an instant dole of praise. Stand to your work and be wise—certain of deed and pen, Who are neither children nor gods, but men in a world of men!"

Will you be equal to that challenge?

