NEWSLETTER OF THE PROBUS CLUB OF NORTH SHORE VANCOUVER

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Management Committee

President: Ron Wood

Vice President: Darryl Stodalka

Secretary: Keith Fenton

Treasurer: Gordon Adair

Past President: Herb Grubel

Communications: Tom Gunn

House: Terry McLeod

Membership: Jeremy Marr

Speakers: John Elliott

Special Events: Doug Magoon

Monday, September 13th Zoom Meeting - 9:30AM

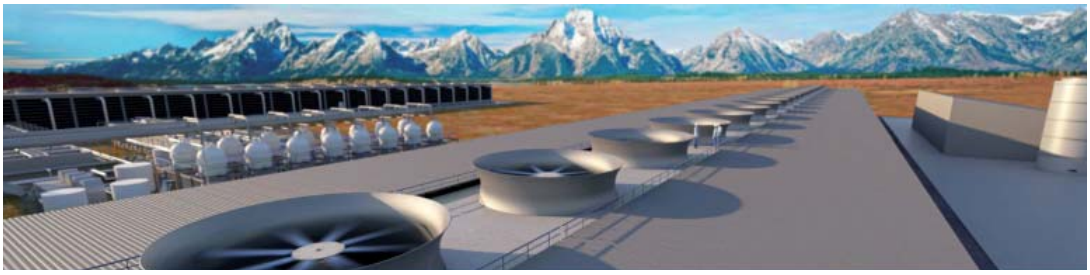
Annual General Meeting followed by guest speaker

Anna Stukas, P. Eng.,VP Business Development, Carbon Engineering Ltd., Squamish

"The Climate Revolution and how Direct Air Capture will enable clean infrastructure, mitigate risk, and provide affordable solutions for true net-zero CO_2".

Anna Stukas is a Vice President Business Development at Carbon Engineering Ltd. (CE), a Canadian-based clean energy company. CE is leading the commercialization of ground-breaking technology that captures carbon dioxide directly from the atmosphere, and a second technology that synthesizes it into clean, affordable transportation fuels.

Anna is a professional engineer with over 15 years' experience bridging the gap between technology and business to overcome barriers to cleantech commercialization. Anna previously worked with Angstrom Power and BIC developing hydrogen and fuel cell technologies, where her responsibilities spanned IP and licensing strategy, product safety, and international regulatory development. She currently leads a variety of CE's partnering and strategic business development efforts, and previously led CE initiatives ranging from strategic projects to government programs. Anna's work has been recognized by the Minerva Foundation's Women In™ Energy Award for Philanthropy and Business in Vancouver's Forty Under 40 Award. *Below is the Carbon Engineering facility in Squamish.*



Mark Your Calendars with These Important Dates

Monday, October 4th, 2021 Zoom Meeting - Dennis Molnar, Historian, *"Amazing People Stories of World War 2 (Part 3) including the British Women who sank 5 German U-Boats".*

October 4th Pre-Meeting Coffee Session - view information on page 3...

President's Notes

As these are my last "President's Notes" prior to the Annual General Meeting September 13th, I wish to acknowledge that it has been a privilege to have served as President and to have been associated with an exceptional team of individuals on the Management Committee.

Despite the unprecedented challenges of the last year, it is most encouraging that our Club has had a successful year, has retained a membership of 280, is in a strong financial position and, due to the quality of speakers, has consistently attracted an audience at our meetings of approximately 100 members.

Although the meetings in the immediate future may not be in-person, particularly due to the latest Provincial Health guidelines, I encourage everyone to renew your membership on receipt of the recently forwarded invoice. Your continued commitment will ensure the Club's financial viability and also enable John Elliott, Speaker's Chair, to contact prominent speakers interested in addressing larger audiences.

Your attendance at the AGM is also encouraged as a quorum of 15% of our members and a vote of 50% of those present is required to approve the previous meeting minutes, financial statements and the election of Darryl Stodalka as President and the new members of the MC.

Following a brief AGM, Ms. Anna Stukus, VP of Carbon Engineering Ltd., will address the much publicized and innovative concept of "Carbon Capture" which promises to be a most relevant and interesting presentation.

A personal thank you to all the members for your support this past year and best wishes to the 2021/2022 management team for another successful year of our North Shore Club.

Ron Wood

2021 AGM Materials

All materials for the AGM on September 13th will be sent to members prior to the AGM. Please review these items listed below as hard copies will not be provided.

The 2021/2022 Management Committee proposed slate, to be elected, is included on page 3 of this newsletter. The AGM materials include:

- an Agenda,
- 2021 Annual Report,
- Draft Minutes from the May 10, 2021 Special General Meeting, and
- Financial Statements as at August 31, 2021

October Zoom Coffee Session

Starting in October, Pop-Up meetings will be replaced with a new approach for a pre-meeting Coffee Session. More informaiton about these sessions will be provided in the October newsletter.

Terry McLeod

Special Events

Good news! After months of COVID-induced curtailments, we now have an opportunity for a fellowship outing, courtesy of one of our members who owns a 44 foot boat capable of accommodating 15 guests, He has volunteered to take a group of 15 members on a day-long cruise up Indian Arm, highlighted by a tour of the historic Wigwam Inn. Signup, when announced, will be via email to on a first come first served basis.

LOOKING FOR A SMALL FAVOUR - another member who owns a 45 -50 foot boat who would be willing to host an additional 15 members for the outing. If you can help, contact Doug Magoon.

Membership Renewals

MEMBERSHIP RENEWAL REMINDER

If you have not already done so, please either mail your cheque for $60, along with a copy of your renewal email previously sent to you on August 8th, or pay by Interac e-Transfer to nsprobusfees@gmail.com.

If you have any questions, contact Jeremy Marr

New Member Introduced and Welcomed at August Meeting

Alan Lill was born in Winnipeg but moved to Vancouver to go to UBC and get a degree in Civil Engineering.

He stayed in Van-couver and joined the Department of Fisher-ies and Oceans based here and where he spent 35 years as an engineer, manager and director mostly in the fi eld of salmon enhancement. Then he broke into consulting, still in fi sheries, in the area of Habitat Restoration.

Now retired, sort of, he is Chair of the Canadian National Railways Historical Association. His other interests are photography, sailing, travel and, of course, model railroading.

A few years ago he was Commodore of Eagle Harbour Yacht Club and, for fourteen years, he was Chair of the Building Committee of Highlands United Church.

Jeremy Marr

Last Month Speaker - Dr. Walker

Dr. Michael Walker is a Senior Fellow at the Fraser Institute and President of the Fraser Institute Foundation. As an economist, he has authored or edited 50 books on economic topics. His articles on technical economic subjects have appeared in professional journals in Canada, the United States and Europe.

His topic for us today is "What is happening in the capital markets?" which he feels is a good fit with a group like the Probus Club. Key questions include "why are interest rates so low?" and "why is risk capital scarce?" The overriding answer to both questions is that market rates of interest and the taste for risk are reflecting movements in the natural rate of interest. The natural rate of interest is determined by the supply of and demand for capital. Referring to recent US data, the owners / lenders of capital are not formal institutions like the FED, banks, pension funds etc. as many might think, but is actually the households of the US who own 91 percent of the 88.171 Trillion$ in real wealth as of 2018. The same is true in Canada. So for information, we don't look at what is happening in Washington or Ottawa, but at what is going on in the households of the US and Canada.

In looking at the net assets of US households by age, the natural lenders are predominantly the 50 and older age group. They are the actual lenders of wealth which may be through insurance companies or banks etc. that hold the wealth on their behalf. The natural debtors/ borrowers are the less than 50 year olds. Dr. Walker's hypothesis is that the natural rate of interest is the rate determined by the interaction between the stock of natural lenders and the stock of natural borrowers in the population. Other things being equal, the natural rate should vary with the relative size of the lender and borrower stock within the population. Therefore the ratio of these two groups will determine the interest rate. The lender / borrower ratio varies with the death (birth) rate which he demonstrated using three pyramid graphs with declining death rates.

Looking at lender/borrower ratios for countries comprising 90% of the world's GDP – Japan which is at the top of the list and is well known for its aging out has a ratio of .6; Germany is second and not far behind due to the impact of two wars and other circumstances that have resulted in low birth rates over time; China (looking at year 2025) is on the list in 3rd place which was used because China is aging out at a rate much more quickly due to their one child policy affecting the growth of the population. At the bottom of the chart are countries with robust growth rates such as India, Mexico, South Africa, and Saudi Arabia. Canada is somewhere in the middle.

A regression analysis was done to show how well this hypothesis does in predicting interest rates in those differ-

ent countries. Inflation rate was added into the equation to level the playing field. Also added were ratings of governments ranked according to their policy structures. For example, a country with no taxes would experience very high interest rates due to high level of borrowing. The model produces an Adjusted R Square number which explains the degree to which this equation explains the data, and in this case it is .88 meaning that 88% of the of the data can be explained by the model. Applying the model to testing across the world in the 29 economically largest economies in the world, results in 90 percent of variation in current world wide interest rates being explained. This gives great confidence. History provided a "natural experiment" to test the model.

Modelling identified three distinct Lender / Borrower ration periods:

1. 1905-1956 There was an increasing lender stock to borrower stock (L/B) ratio driven by shrinkage of the borrower stock due to a virus (Spanish Flu) where the main losses were of young people, and then further compounded by the deaths in the World Wars. Ratio increased 80% over 51 years.*

2. 1957-1996 During this time, there was stability in the L/B ratio driven by the baby boom and household formation. Ratio started at .2601 and ended at .019.

3. 1997-2020 We saw rapidly increasing L/B ratio due to a rapid increase in lender stock over this time. Ratio increased 65% in 23 years.*

**Both periods of rising L/B ratios are associated with otherwise unexpected large reductions in interest rates.*

The US had been growing at 1.5 – 2 percent per year and experienced a dramatic drop in birth rate following the Spanish Flu and two world wars. Then the post WWII baby boom beginning in 1949 flattened the Lender/Borrower ratio which did not rise materially again until 1995. The additions to the borrowers were in the neediest end of the age distribution and the surge caused interest rates to rise, to which the Feds responded with stimulus spending causing inflation rates and interest rates to rise to double digits until the Fed stopped the money supply growth. Over time the rates dropped as the baby boom turned to a bust and the Lender / Borrower ratio rose rapidly signaling an increasing number of lenders in the population.

To summarize, and to answer the question of why interest rates are low, it is because the stock of natural lenders to natural borrowers in the US and globally is at historically high levels. To answer the question of why risk capital is less available, it is because the lenders are aging out and don't want to take risks. Older people accept less risk, with analysis showing that at age 66, the taste for risk drops dramatically.

Questions

Q1 What is the impact on Canadians? Debt is rapidly increasing. We talk about the ratio of debt to GDP and the Liberals suggest it is not a problem.

A The ratio of debt / GDP is not a problem. The real determinant of the interest rate are the relative #'s in the population of natural lenders. Post WWII, there was massive debt, but it had no effect on interest rate as the borrowers had been wiped out from the Spanish Flu and world wars. Now people have a lot of money but want to take less risk, and are happy with holding Government bonds. Governments are happy to finance at 1-2%, and they use the borrowed money or taxes to undertake projects which will be politically favourable.

Q2 How does the recent Covid 19 pandemic and government borrowing affect your interest rate projections?

A We are now in a position not unlike that after the First World War – worldwide, not just in Canada. The lender stock is so large compared to the borrower stock it is unlikely to have any impact at all. Don't expect to see any change in government bond rates unless the government starts printing money. The inflation rate would go up, with the interest rate following close behind. I don't expect this to happen. There is now a more general understanding in the Central Banks around the world. I see low rates continuing for the foreseeable future, with maybe a marginal increase over time (25 basis points).

Q3 Inflation?

A The lesson has been learned in most countries at great expense that you can't let the growth of the money supply be faster than the growth of productivity or else you get inflation. When this happens, it is considered "inflation tax". There is no appetite for this in "sensible" countries.

Q4 Acknowledging your analysis of how interest is determined, many Canadians are concerned about how the National and Provincial Canadian debts will be repaid? Will they ever be repaid?

A I doubt that they will ever be repaid, but they are being amortized over time, and so not just paying interest on the debt. We have to look at the total amount of government debt relative to GDP. All Government bonds mature and have to be re-financed. If they are unable to re-finance, then the Government will print money. Our population will be shrinking as well so there won't be the same need for government expenditures, pensions, etc. China is in real trouble. They are going out of business. They can't force people to have children. They did too good a job in preventing population growth … and Canada did too!

Last Month Speaker - Dr. Walker

Q Is immigration policy driven by the L/B forecast?

A The L/B ratio for 90% of the world are increasing as they have low birth rates. We can get refugees, and get people from China to move here, but if immigration is going to be successful, it will have to come from the low birth rate countries with lusty birth rates such as India, Latin America etc. Fortunately for Canada, that is where many of our immigrants are coming from.

Q Mark Carney, despite leading both the Bank of Canada and the Bank of England, seems to argue in his latest book that ESG is going to be the primary mover of markets in the future, not the conventional supply and demand in the markets. What is your view of ESG?

A I don't have a high regard for Mark Carney, frankly. I don't even know what ESG means. The question was posed to Herb Grubel (in attendance), who did not answer but offered some opinions on the topic. On the topic of inflation, in order to get inflation, you need to have a government that decides to stop issuing bonds and issues currency instead. I have a high respect for John Greenwood – will look for his article in the Wall Street Journal. The definition for ESG = Environment Social Governance, which relates to guidelines for investment.

Q How does the Treasury buying its own bonds affect the equation?

A Treasury Bills are of a certain term – 30, 60, or 90 days. Government bonds are mature at the end of their term and the government continually re-finances them when they become due. This is nothing new. This is an opportunity to finance at low rates of interest. Most of the people are like us now and don't want to be taking risks now, unlike for the young and middle aged.

Q Why were interest rates so high in the 1980's?

A It's demographics. The post war baby boom was a burst in the population that caused a great reduction/flattening of the lender/borrower ratio which caused a natural increase borrowing and in interest rates. In response, the Governments in Canada, England and the USA started to print money to offset the rising rates, not realizing at the time that this was a natural and temporary phenomenon based on the needs of the young post-war baby boomers. So this was caused not so much by the lender / borrower ratio but by the overreaction of the governments which caused inflation to rise, as the economy was already running at capacity. They subsequently pulled back on this policy and interest rates fell back to more normal levels.

This summary was prepared by member Darlene Dean

A Little Humour

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The Probus Club of North Shore Vancouver

Editorial contributions and comments are welcomed and may be sent to the Aministrator
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