The Alberta Buck - Architecture (DRAFT)

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An Alberta Buck defined in terms of the value of a basket of commodities, and issued based on proof of insured and attested wealth, would dramatically impact private and public debt supply and demand, treasury savings operations, and the supply of broad money presently provided through commercial bank collateralized "lending" operations.

Many historical proposals and attempts have been made to substitute "Hard" wealth-backed money for "Fiat" debt-issued money, with few successes. Pure "Fiat" currencies have dominated global trade and commerce for the last 50 years, for a variety of reasons.

However, the global USD\$332T¹ in public debt, with its approximate \$15T/yr required interest transfer – 15% of global \$106T² GDP or the global \$96T³ M2 money supply – cannot mathematically be maintained. The question of whether the privilege⁴ of issuing debt-backed money actually warrants this transfer of global wealth remains open to debate.

We propose that dynamically issued wealth-backed money has several valuable qualities vs. debt-issued money that have not be adequately explored. These qualities could provide significant "first mover" advantages to the jurisdiction that provides a globally desirable implementation of commodity asset denominated money.

We believe that Alberta is uniquely positioned to benefit from this first mover advantage, and that Alberta's citizens would reap significant benefits from this transition. We also propose that the architectural, legal and technical limitations preventing such a monetary transition have been surmounted. (PDF, Text)

 $^{^1 \}rm{Global~debt} \ ^{\sim} \rm{USD\$335T}, \, 2205$ $^2 \rm{Global~GDP} \ ^{\sim} \rm{USD\$106T}, \, 2023$

 $^{^3}$ Global M2 $^{\sim}$ USD\$96T, 2025

⁴Money in the Modern Economy Bank of England, 2014, pp11

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1 How Could This Possibly Be True?

This paper presents some preposterous claims, and you would be wise to be careful! Usually, bold, counter-cultural claims should be met with a very high bar for proof. And, this is no exception.

However, I ask you to suspend disbelief for a moment. There is recent precedent. The theory underpinning powered flight has oscillated wildly between multiple foundations for 100 years, while we went from Kitty Hawk, to the SR-71 Blackbird, to the Boeing Dreamliner and now to the SpaceX Super-Heavy and Starship. We clearly understand something. Shockingly, the present widely held belief that powered airfoil lift is produced due to the Coanda Effect⁵ also turns out to be . . . wrong!

Could "the dismal science" of Economics also turn out to be wrong about something that literally every politician and central and commercial banker holds as self-evident and true? Even something that seems to "work", like Fiat monetary systems have for the last 100 years?

"It is well enough that people of the nation do not understand our banking and monetary system, for if they did, I believe there would be a revolution before tomorrow morning." – Henry Ford

⁵Misunderstanding Flight 2023 Bernoulli or Coanda effect? Neither, as it turns out...

The thing about self-delusion is that it will continue to "work" – right up to the moment it doesn't. You may believe you understand flight, right up until the moment gravity slaps you dead.

We may be at that moment, economically, in Canada. Our primary goal must be to face facts, and at least do something that is *possible*; we then have at least a *chance* of success. Debt-based money is not a closed cycle, and cannot be unwound, reduced or permanently maintained – evidenced by both mathematical derivation and global practical proof. Wealth-backed money can.

"The first step is to establish that something is possible then probability will occur."

– Elon Musk

The \$338T tsunami of global indebtedness, consuming 15% of global GDP, and Canadian public debt alone swallowing over 10% of every Canadian family's total net income *simply can not continue*. The laws of physics guarantees it. When the time inevitably comes, Canada (and by extension Alberta, if we choose to shun monetary autonomy) will have to face the decision: do we throw our banks under the bus, or our citizens? Because it will have to be one or the other. And right now, since the banks are in the driver's seat, it's pretty clear what the default answer will be.

The time has come for Alberta to cease "safely" running after the rat in front of us, step out of the violent flow of history, and take a principled stand.

Stand for Alberta's citizens.

2 Introduction: The Hidden Cost of Debt-Based Money

Every dollar circulating in Alberta's economy originated as someone's debt to a bank. When an Alberta family takes out a mortgage, the bank creates new money by typing numbers into an account, as Werner⁶ empirically demonstrated. The family provides real collateral – their future home – and commits to decades of interest payments, while the bank risks *no* existing assets and creates the loan principal from nothing through accounting entries.

This system imposes a hidden tax on every economic transaction in Alberta. The province's households currently carry \$197 billion in mortgage debt and pay approximately \$10 billion annually in mortgage interest alone. Alberta businesses shoulder an additional \$203 billion in debt with corresponding interest obligations. Meanwhile, the provincial government itself pays \$3.2 billion yearly servicing its \$82.8 billion debt⁷. Collectively, Albertans transfer over \$23 billion annually to financial institutions simply for the privilege of using money that banks create costlessly through regulatory exemption.

The alternative – wealth-backed money creation – would enable Albertans to monetize their existing assets without interest obligations. Instead of "borrowing" the full value of a home and paying principal and interest for 25 years, a homeowner could verify the property's value, create Alberta Bucks equivalent to a portion of that net value, and use those units to reduce the total cost of acquiring the property or for other transactions, while retaining full use of the property. The obligation would simply be to redeem the created units if selling the property, with no interest accumulation (or principal repayment terms) on the created units over time.

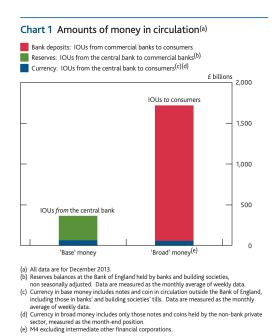
Alberta loses \$63 million daily to interest payments on commercial bank debt-issued money. Analysis reveals that transitioning to wealth-backed money would reduce the effective cost of home ownership by over 40%, eliminate the interest burden that at times forces up to a third of Alberta farms to operate at a loss, and free up over \$3 billion annually in provincial debt servicing for productive investment.

⁶How do banks create money... Werner, Richard A., International Review of Financial Analysis, 2014.

⁷Alberta 2025-28 Fiscal Plan Alberta Budget 2025

2.1 The Mechanics of Money Creation: Debt vs. Wealth

Let's first address this claim that "broad money" is created primarily by commercial bank issuance, incorrectly framed as "lending". To quote the Bank of England's Money in the Modern Economy⁴:



How are they created?

Unlike currency, which is created by the Bank of England, bank deposits are mostly created by commercial banks themselves. Although the stock of bank deposits increases whenever someone pays banknotes into their account, the amount of bank deposits is also reduced any time anyone makes a withdrawal. Moreover, as Chart 1 shows, the amount of currency is very small compared to the amount of bank deposits. Far more important for the creation of bank deposits is the act of making new loans by banks. When a bank makes a loan to one of its customers it simply credits the customer's account with a higher deposit balance. At that instant, new money is created.

Banks can create new money because bank deposits are just IOUs of the bank; banks' ability to create IOUs is no different to anyone else in the economy. When the bank makes a loan, the borrower has also created an IOU of their own to the bank. The only difference is that for the reasons discussed earlier, the bank's IOU (the deposit) is widely accepted as a medium of exchange — it is money.

Most money circulating is indeed created through debt transactions at commercial banks. But what does this really mean, in practice? Is this really "lending", "borrowing" or "loan origination", or is it really something . . . else?

2.1.1 Lending vs. Issuance: Client Money Rules

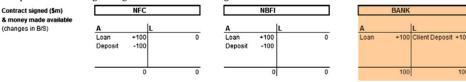
Anyone can lend something (business lending is not even regulated), and it is clear to everyone what the preconditions for "lending" are:

- 1. The Lender holds rights to some desirable asset.
- 2. The Borrower wants the asset for some period of time.
- 3. The parties agree to:
 - The value of the asset
 - The terms of the transfer of the asset to the Borrower, and an eventual return of "principal" to the Lender.
 - The "interest" fees required to cover the Lender's loss of use of the asset plus the risk of the terms on principal and interest payment not being met by the Borrower.

Is this what a commercial bank does? They certainly call it "lending", and intend you to believe that is what is happening. If so, how does this action relate to the broad money supply? Let's see what Werner⁶ found, by comparing "lending" by a non-financial corporation or citizen (NFC), a non-bank financial institution (NBFI) like a stock broker, and a commercial bank (BANK).

Looking at the accounts *after* the loan is contracted and disbursed, we can see that the non-BANK balance sheets make sense (remain in balance), but the BANKs' Assets and Liabilities have both increased:

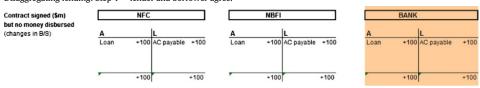
Comparative accounting: taking out a loan and disbursing it.



This table shows how accounting conventions handle the granting and disbursing of a loan by different types of firms: a non-financial corporation (NFC), a non-bank financial institution (NBFI, e.g. a stock broker), and a bank. In this and the following tables, only the change in balance sheet items is shown. As can be seen, something is different in the case of the bank.

How and when did this occur, and why only for a commercial bank? At the moment a loan contract is signed in Step 1 (but before it is disbursed in Step 2), all 3 entities balance sheets are in agreement:

Table 2 Disaggregating lending: Step 1 — lender and borrower agree.

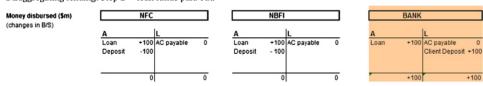


This table shows Step 1 of the loan operation, now disaggregated into two steps. All parties have signed the loan contract, but the borrower has asked, out of convenience, to delay the disbursement of the loan, which happens in Step 2. Interestingly, at Step 1 it is seen that the accounting treatment is the same for all lenders, including the bank. Banks are not different in any way concerning Step 1.

Here's where things go pear-shaped. To quote Werner:

However, as can be seen in Table 3, the story is quite different for the bank. Surprisingly, we find that unlike the other firms whose balance sheets shrank back in Step 2, the bank's accounts seem in standstill, unchanged from Step 1. The total balance sheet remains lengthened. No balance is drawn down to make a payment to the borrower.

Table 3 Disaggregating lending: Step 2 — loan funds paid out.



This table shows Step 2 of the loan operation, disaggregated into two steps. All lenders now disburse the loan and thus discharge their liability. For firms without a banking licence, the balance sheet contracts and thus reverts back to the original position. For banks only the balance sheet remains unchanged in its expanded position — banks remain stuck in Step 1. In other words: banks do not discharge their liability.

As it turns out, what you and I (and everyone) agrees is "lending", is **not** what commercial banks do:

Kashyap et al. (2002) argued that what makes banks unique and the reason why they engage in the two tasks of lending and deposit-taking simultaneously was the granting of loan commitments and the resulting need for liquidity provision. However, loan commitments are a subset of lending activity, and we have found that what makes banks unique and requires them to combine lending with deposit-taking does not derive from the lending function per se — since business lending is not even regulated, so that anyone can engage in it without a licence, and, as we saw, the impact of signing a loan contract is common to all firms (Step 1 in the disaggregated accounting of lending).

What makes banks unique and explains the combination of lending and deposit-taking under one roof is the more fundamental fact that they do not have to segregate client accounts, and thus are able to engage in an exercise of 're-labelling' and mixing different liabilities, specifically by re-assigning their accounts payable liabilities incurred when entering into loan agreements, to another category of liability called 'customer deposits'.

What distinguishes banks from non-banks is their ability to create credit and money through lending, which is accomplished by booking what actually are accounts payable liabilities as imaginary customer deposits, and this is in turn made possible by a particular regulation that renders banks unique: their exemption from the Client Money Rules.

So, we see that commercial banks do not have "assets" that they "lend"; they create Liabilities which they do not pay and call them Customer Deposits. If anyone else did this (receiving your promise of loan repayment as an Asset, and creating some numbers in a Liability account and calling it a "Deposit"), of course these "Deposits" would be considered worthless. But, by convention, these Deposits are considered "broad money" – all money that can be readily spent or turned into spending.

In summary: commercial bank "lending" is actually broad money "issuance", and since the Liability "Deposit" is created ex-nihilo, the Interest and Repayment terms of the loan are completely arbitrary. They could make the terms zero (no Principal repayment until the loan is concluded, and no Interest due for the duration) – and they would lose **nothing**, and endure no additional risk (since the collateral asset is insured, at the owners expense, payable to the bank). Their balance sheet would expand when the broad money was created. Then it would contract when the money was returned and destroyed.

Since there is no asset that the bank loses access to, the function of Interest (to recompense the Lender for loss of use of their asset) and Principal repayment (to restore the asset or equivalent back to the Lender in a reasonable time) are entirely arbitrary.

They essentially serve the function of allowing the commercial bank to package up these issuances into what appear to be broad money "loans" in tranches of similar "risk" and "return" (just like a real loan issued by a non-bank actor), and spin them off as CLOs (Collateralized Loan Obligations) to crystalize the "loan" profits, and get the asset/liability off of their books.

2.1.2 Wealth-Backed Issuance

Now that we understand what "lending" is, and how it differs from commercial bank "issuance" of broad money, let's see whether or not we can deploy these principles to allow private citizens to legally issue broad money – without resorting to any of the legal exemptions allowed commercial banks.

Our goals are to:

- 1. Issue "broad money" something that can be readily spent or turned into spending.
- 2. Use standard, compliant balance sheet operations no violating Client Money Rules.
- 3. Founded on basic, strong contract and common law unquestioned legal foundation.

It is, of course, legal for citizens to convert non-money assets and flows into broad money; asset sales, receivable factoring, and many other means are regularly used to convert non-money assets into money – but, these *normally* entail the exchange of the sellers' contractual or title rights to these assets for the pre-existing monetary savings of the buyer, in some form – not the direct *creation* or *issuance* of new money.

The exception is barter; where some asset (gold, live chickens, ...) is directly used as broad money. This use case is so onerous and rare (see: Coincidence of Wants) that it is essentially ignored by monetary regulators.

But, what if citizens could arrange their affairs such that their wealth is directly used to issue valuable fungible tokens? There are many such RWA (Real World Asset) tokens that exist and are in development, for example buying Tether Gold's XAUT/USDT and Paxos' PAXG/USDT on Uniswap, or directly minting Kinesis KAG or KAU tokens from your own physical Gold and Silver holdings held in Kinesis vaults.

Interestingly, USDT (definitely part of broad money) is itself about 20% "backed by" non-monetary assets (Gold and Bitcoin) – which is why it is not considered compliant with either Europe's MiCA regulation or America's GENIUS Act. Tether is essentially monetizing (issuing) their own Real-World Assets into broad money (USDT tokens). Hmmm...

So, we see that we can already create RWA tokens, and exchange (sell) them via Uniswap for broad money (USDT, USDC, etc.), which we can trivially exchange for commercial bank deposits via any number of regulated exchanges (eg. Netcoins.app in Canada). Therefore, nothing would legally prevent us from owning some asset, creating an RWA token representing a claim on that asset, and then selling that asset token to obtain broad money (USD\$ for example). This is not "issuance", just selling something (eg. a KAU token created by my holding of Gold in a Kinesis vault) for money. Later, someone may come to Kinesis to claim some physical gold in exchange for their KAU holdings – if my Kinesis holdings have dropped below a certain threshold, this might even be **my** original gold held at Kinesis.

But what if people started accepting KAU or PAXG directly in payment for goods or services? Pretty much *anything* that can be "spent or readily turned into spending" are considered broad money.

Could it be possible to create something like KAU (backed by my gold) or PAXG (backed by random gold), but could be created by attested and insured holdings of *any* wealth, and has a claim against that wealth, and has is sufficiently fungible to satisfy the Coincidence of Wants and be trustworthy and useful enough (be spent or readily turned into spending) to be directly used as broad money?

Yes. Yes, it is possible!

The Alberta Buck is defined as being:

- Equal in value to a basket of Canadian commodities, and
- Issued backed by a claim on any attested and insured wealth.

It can be:

- Exchanged for existing broad money (eg. via a Uniswap BUCK/USDT DeFi pool), or
- Used directly as broad money for selling, buying, borrowing or lending because it's stable.

The BUCK is brought into being by an insurer issuing a BUCK_CREDIT NFT for the market value of the insured asset to an Ethereum account.

The BUCK tokens themselves are entirely fungible (they represent the *value* of a proportional claim on the entire pool of "backing" assets), but do not individually represent any *particular* asset or claim. Their value is defined as being worth a certain basket of commodities, but there need not be *any* of each of those commodities (eg. Uranium) actually being held as the wealth "backing" the BUCK. Probably more gold and live chickens than yellowcake...

Practically, to accomplish all this, the BUCK needs to solve 3 distinct problems in an automated, decentralized fashion with high public confidence:

- Issuance based on a legal claim on real wealth; loss of that wealth results in a withdrawal of BUCKs.
- General in/deflation dynamically produces a broad issuance/withdrawal of BUCKs to stabilize value.
- Individual accounts that go negative are recovered, at the risk and expense of the account holder.

The solutions must separate legal and regulatory concerns (which grind away slowly, at the speed of the courts), from parametric concerns which must be executed on a transaction by transaction basis.

1. BUCK CREDIT NFT: Parametric Asset Insurance

The BUCK is backed by legal claim on real wealth. We do this all the time; anyone can place a legal lien on someone else's property when they feel they are owed something – and they can seize it when they can prove that claim to a court of law. Insurance contracts are a concrete example of this process; if you write off your insured car, the insurance company pays out your claim but seizes the wrecked car. Likewise, if you wish to monetize some wealth into BUCKs, you must insure it to some attested value – just like for the bank, when you get them to issue CAD\$ to fund your mortgage.

This will require some integration with existing insurers and the creation of a Parametric Insurance product, which will limit the types of assets usable to back the Alberta Buck initially. However, globally RWA tokenization is exploding, and RWA insurance is developing rapidly to address this sector, so we are confident that we can work with insurers to bring appropriate products to market.

Initially, some of the simplest BUCK monetization targets will be:

- Cryptocurrency held in a locking contract with an insurer
 - If the owner fails to sign on time, the contract pays out BUCKs from the insurer, and the insurer claims the backing cryptocurrency.

- Valuable collateral held by a trusted third party (eg. precious metals held in a depository)
 - If the third party fails to sign a report on the assets, the contract pays out BUCKs, and the insurer claims the collateral assets.

Later:

- Home and auto insurance
 - If the insurer reduces the attested value of the property, the contract pays out BUCKS, and the insurer claims the property.

None of the infrastructure or technology underpinning these types of insurance products is a significant technological risk.

2. BUCK ERC-20 Issuance: Value Stabilization Factor

The BUCK ERC-20 interface implements dynamic issuance; you can send BUCKs from the Ethereum account up to your BUCK_CREDIT limit * the current BUCK_K⁸ Value Stabilisation Factor.

Until all components of the BUCK commodity basket are available in online DeFi pools, BUCK_K will be the median of multiple authorized independent external Oracles computing the current target valuation of BUCK's commodity basket in terms of each BUCK/XXX pool (eg. USDT, CADT, ETH, wBTC, PAXG). Each external Oracle will run one of a variety of differing PID (Proportional Integral Differential, with and without Kalman filtering), MPC (Model Predictive Control), etc. controllers, and the median of the computed BUCK_K Value Stabilisation Factors will be used.

All of these control techniques have been long employed in industrial automation, and are simple enough to model that a stute market makers can run "tighter" controls and front-run the control algorithm; this will have the result that market makers can detect inflation/deflation of eg. BUCK/PAXG early and pre-emptively sell BUCK / buy PAXG when they detect BUCK inflation, on the assumption that the Oracle-produced BUCK_K response will eventually take effect, yielding the market-maker a quick ROI. However; the net effect will be an automatic correction of BUCK/PAXG without requiring as large a BUCK K control impulse.

Conversely, if some whale attempts to corner the market and influence eg. BUCK/PAXG or BUCK/USDT by selling large amount of BUCKs via the DeFi pools, the response of the BUCK_K Oracles (which all have a certain amount of kP and kD PID factor) will spike the BUCK_K multiplier, as the process-value/setpoint Proportional (error) and Differential (rate of change) spike. The immediate flood of BUCK liquidity (remember, every accounts' limit is BUCK_CREDIT NFT * BUCK_K), and the obvious mis-pricing of eg. BUCK/USDT vs. the inherent value of the BUCK's basket of commodities, which is publicly known and computed in real time, will allow many independent BUCK_CREDIT accounts to immediately issue BUCKs and "soak up" the artificially depressed BUCK/USDT and BUCK/PAXG DeFi pool assets. Basically, the BUCK system will systematically transfer the assets of the Whale to the participating BUCK credit holders. As soon as the manipulation ceases, the new USDT and PAXG holders can cash in their gains, either returning their BUCK holdings to their prior levels (plus any profit), or just go on a well-deserved vacation. Thanks, Whales!

3. BUCK ERC-20: Parametric Default Insurance

⁸A dynamic Credit Factor 'K' is computed which maintains a zero inflation rate.

The closer your BUCK negative balance comes to your BUCK_CREDIT limit, the more costly your Parametric Default Insurance becomes. Regardless of the effectiveness of asset valuation or insurance, there exists the possibility that an individual account may go into default (negative BUCK balance exceeds BUCK_CREDIT limit) due to changes in BUCK_K. This is a risk with any dynamic issuance system.

When the BUCK's ERC20.mint API is called, a portion of the proceeds proportional to the default risk of the account is applied to support the default insurance. This could be purely a risk premium, or an investment in a mutual insurance scheme (fractional ownership of the risk pool), or some combination.

Since the risk is open-ended (the minted balance could remain at risk for an indeterminate period), the mutual insurance scheme where the client invests a certain (risk-calculated) percentage of their BUCKs in the insurance pool is likely to be best – the act of minting BUCKs supports funding the BUCK default risk pool, and the parametric insurance pools' profit margin (algorithmically set to eg. 10% APR) pays the client's risk premium. Later, if the client defaults, the invested assets would be used as the deductible; otherwise, they are returned when the client reduces (via ERC20.burn) the draw on their BUCK_CREDIT.

3 Debt-Issued vs. Wealth-Backed Money

Now that we've re-established the possibility of wealth-backed money (not that this was ever really in question, since this was the monetary standard for the vast bulk of human existence...); let's review some practical examples of how this works.

3.1 Current Debt-Based System

Under the existing system, money creation follows a perverse logic that enriches financial intermediaries at the expense of productive economy participants. When an Alberta farmer needs \$500,000 to purchase equipment, the lending bank performs the following operations:

The bank creates a loan asset of \$500,000 representing the farmer's promise to repay, and simultaneously creates a \$500,000 deposit liability. No existing bank funds move or become unavailable. The bank's balance sheet expands by the stroke of a pen. The farmer, however, pledges real collateral – perhaps the farm itself – and commits to paying \$68,000/yr 6% annual interest, totaling \$180,000 over a 10-year term.

The economic absurdity becomes clear when examining what each party contributes. The farmer provides genuine valuable consideration through collateral and productive labor to generate repayment capacity. The bank provides an accounting entry made possible solely by its regulatory exemption from Client Money Rules, as Werner⁶ documented. Yet the farmer pays \$180,000 for this costless bank operation while risking losing the collateralized assets if unable to maintain payments.

3.2 Wealth-Backed Alternative

Consider the same farmer under a wealth-backed system. The farmer owns \$1 million in land, equipment, and stored grain. Through a wealth "attestation" process similar to current property assessment and title insurance methods, these assets are verified and valued. The farmer can then create Alberta Bucks equivalent to $50\%^8$ of the attested value – \$500,000 – while retaining full use and benefit of the assets.

The critical difference emerges in the payment structure. Rather than paying interest to a bank, the farmer pays only insurance premiums to protect against asset loss; typically 0.5% to 1% annually for agricultural assets. On \$500,000 in created money, this represents \$2,500 to \$5,000 yearly versus \$30,000 in bank interest. The \$25,000+ annual difference remains in the farm operation, funding expansion, equipment modernization, or household consumption.

The balance sheet operations also differ fundamentally. The farmer's personal balance sheet shows an asset (the pledged wealth) and a liability (the obligation to redeem Alberta Bucks if selling the asset). The provincial monetary system shows the created Alberta Bucks backed by the attested wealth. No interest accumulates because no party provided funds that became unavailable – the money was created through wealth attestation, not borrowed from existing pools.

4 Household Impact: Debt Bondage to Wealth Management

For all but the top few percent of households, the greatest emotional and mental burden is attempting to stave off bankruptcy. Food bank usage has doubled since 2019, increasing over 5% year over year. In 2025, almost 20% of food bank clients report being employed, almost double the 12% reported in 2019.

A large proportion of this financial insecurity comes from the burden of debt-issued money.

4.1 Mortgage Debt

Alberta households currently carry \$197 billion in mortgage debt, with the average mortgage standing at \$380,000. Under conventional financing at current rates around 5.5%, a family pays approximately \$21,000 annually in interest during the first years of their mortgage. Over a 25-year amortization, they will pay roughly \$275,000 in interest on top of the \$380,000 principal, meaning they effectively purchase their home 1.7 times.

Under wealth-backed money creation, the same family would verify their home's ownership and value and create Alberta Bucks to purchase it outright. They would pay annual insurance costs of perhaps 0.2% (given the stability of residential real estate), or \$760 yearly. The obligation would be to redeem the Alberta Bucks if selling the home, but no interest would accumulate during ownership. The family saves \$20,000+ annually, funds that can support local consumption, education investment, or business formation.

The macroeconomic implications multiply across Alberta's 580,000 mortgaged households. If even half transition to wealth-backed financing, the province retains \$5.8 billion annually that currently flows to financial institutions. This money recirculates through local economies, supporting retail businesses, services, and employment rather than enriching distant shareholders.

4.2 Vehicle Financing

Alberta households also carry approximately \$12 billion in vehicle debt, paying roughly \$600 million annually in auto loan interest. The average vehicle loan of \$35,000 at 7% interest costs \$2,450 yearly in interest payments. Under wealth-backed creation, a family could attest their vehicle's value and create Alberta Bucks without interest obligations.

The transformation becomes more powerful when considering that vehicles are depreciating assets. Under debt financing, families pay interest on a declining value; a form of double loss. Under wealth-backed creation, the obligation to redeem simply tracks the declining asset value, with no interest penalty compounding the depreciation impact. A family might pay \$100 annually in insurance premiums versus \$2,450 in interest, freeing \$2,350 yearly for productive uses.

5 Business Impact: Probable Failure to Productive Investment

5.1 Agricultural Sector

Alberta's agricultural sector demonstrates the crushing weight of debt-based finance most starkly. The province's farms carry \$37.4 billion ⁹ in debt, with average interest costs consuming a third ¹⁰ of the \$5.7 billion in Alberta's farm cash income. Many operations exist primarily to service debt rather than generate prosperity for farming families and their communities.

Consider a mid-sized grain operation with \$3 million in land, \$1 million in equipment, and typically \$500,000 in stored grain inventory. Under current financing, this farm might carry \$2 million in debt at 5% interest paying \$100,000 annually to banks. In low commodity price years, this interest burden often exceeds operating profits, forcing farmers to borrow more simply to service existing debt; a vicious cycle that has driven countless families from agriculture.

Under wealth-backed creation, the same farm could attest its \$4.5 million in assets and create Alberta Bucks up to perhaps \$2.25 million (at a conservative 50% ratio). Annual insurance costs might total \$15,000 for the diversified asset base. The farm saves \$85,000 yearly, transforming marginally viable operations into profitable enterprises. This difference enables equipment modernization, sustainable practice adoption, and succession planning that debt servicing currently prevents.

The stored grain inventory presents particularly compelling opportunities. Farmers currently face a cruel choice: sell grain immediately after harvest when prices are lowest to service debt, or finance storage costs at interest while hoping for price improvement. With wealth-backed creation, farmers could attest stored grain value, create Alberta Bucks for immediate needs, and redeem those units when selling at optimal prices. This breaks the debt-driven cycle that forces farmers to accept unfavorable prices, improving both farm income and market price stability.

5.2 Small Business

Alberta's 170,000 small businesses collectively carry over \$40 billion in debt, with interest costs representing a major barrier to growth and innovation. A typical small manufacturer with \$2 million in equipment and \$500,000 in inventory might pay \$125,000 annually servicing debt; often exceeding the owner's salary.

Under wealth-backed creation, the same business could attest its equipment and inventory, creating Alberta Bucks for working capital without interest obligations. Insurance costs of perhaps \$10,000 annually replace \$125,000 in interest payments. The \$115,000 difference funds hiring, research and development, or market expansion that debt servicing currently prevents.

The transformative potential extends beyond cost savings. Currently, banks prefer lending against real estate rather than productive assets, forcing businesses to leverage personal homes for commercial credit. Wealth-backed creation values productive assets directly: manufacturing equipment, inventory, intellectual property; aligning capital creation with productive capacity rather than real estate speculation.

⁹Farm Debt Outstanding, 2020-2024

 $^{^{10}\}mathrm{Alberta}$ Farm Cash Receipts, Expenses 2024

6 Provincial Economics: Servitude to Sovereignty

The average Canadian citizen pays about \$2,000 ¹¹ per year in public debt service costs. That's about \$8,000 annually for a 4-person family; over 10% of the average gross \$74,200 ¹² family income.

When a population loses control of a significant fraction of its income to service "public debt", this necessarily pushes aside other significant purchases and investments. Public debt service costs and taxation are by far the largest costs Canadian families pay ¹³, and even so are clearly inadequate to support the seething, overshadowing bulk of government, since governments at every level are running record-braking deficits.

What can be done?

If it is discovered that this public "debt" is *actually* risk-free broad money issuance by commercial banks backed by claims on government assets and future revenue – simply the price paid to banks to issue our money into existence on force buying of public "debt" notes – some alternatives become clear.

Let's examine what Alberta could do, for example.

6.1 Reduced Public Debt Servicing

Alberta currently allocates \$3.2 billion annually to debt servicing; funds extracted from public services and infrastructure investment. This represents \$700 per Albertan ¹⁴ yearly, or \$2,800 for a family of four, transferred to bond-holders rather than invested in provincial development.

Under wealth-backed Alberta Buck creation, Alberta could monetize its vast public assets without debt obligations. The Heritage Savings Trust Fund's \$30 billion value alone could back substantial Alberta Buck creation. Crown lands valued at over \$100 billion provide additional backing capacity. Resource royalty streams, worth \$21 billion annually, offer further monetization potential without debt accumulation.

The province could fund a decade-long infrastructure modernization program by creating Alberta Bucks backed by the very infrastructure being built. A \$50 billion program for schools, hospitals, and renewable energy would typically cost \$75 billion including interest over 20 years. Through wealth-backed creation, Alberta pays only the actual \$50 billion construction cost plus modest insurance premiums, saving \$25 billion that remains available for additional public investment.

6.2 Resource Revenue Optimization

Alberta's resource wealth currently generates provincial revenue through royalties and taxes, but the full value potential remains uncaptured. The province's revenue share of proven oil reserves, valued conservatively at \$2 trillion, could back massive Alberta Buck creation for sovereign wealth fund expansion, economic diversification, and citizen dividends.

Instead of borrowing against future resource revenues at interest, Alberta could create money backed by it's claim on proven reserves, invest those funds productively, and redeem the units as resources are extracted. This transforms resources from a depleting inheritance into a perpetual prosperity engine, as investment returns compound while redemption obligations remain fixed.

 $^{^{11}{\}rm Fraser}$ Institute: Canadian public debt interest cost ~ \$2,000/person in 2025

 $^{^{12}\}mathrm{StatsCan}\colon$ Average after-tax income 2023 $^{\sim}$ \$74,200 in 2023

 $^{^{13} \}mathrm{Fraser}$ Institute: Taxes largest family cost 2024 $^{\sim}$ \$48,306 of avg \$114,289 gross income

¹⁴Fraser Institute: Albertans will pay 2025

7 The Need For Urgency

Stablecoins backed by USD debt instruments are exploding in use globally ¹⁵. Simultaneously, the Government of Canada is restricting access to crypto technology, preventing similar CAD based instruments, and crippling CAD denominated projects and jurisdictions by restricting them from benefiting from the improvements in operational efficiency and access to funding provided by these technologies.

Alberta is uniquely positioned to establish itself as a global leader in this field, by offering the world's first Stablecoin backed by a stable, secure and unencumbered basket of valuable commodities, instead of volatile and risky foreign debt instruments.

To accomplish this, Alberta must immediately initiate a comprehensive research and development program to prototype wealth-backed money creation systems. The technical foundation exists through recently discovered failure-resilient distributed ledger technologies and established asset insurance and attestation methods and constitutionally protected legal remedies, but integration and testing require dedicated resources and expertise.

We have home-grown Alberta talent with a proven track record of building continent-spanning industrial automation. It is time to apply this Alberta Advantage to the *next generation* of wealth expanding technology: Wealth-backed instead of Debt-backed Stablecoins.

7.1 Prototype Development Requirements

The prototype system must demonstrate several critical capabilities. Asset attestation mechanisms must accurately value diverse wealth types from real estate to agricultural inventory while preventing fraud and double-pledging; the insurance industry already has expertise in this, and applying it to tokenized RWAs is actively being researched. The distributed ledger must process transactions at commercial speeds while maintaining security and auditability; recent breakthroughs in Byzantine Fault Tolerance and CAP theory resilient distributed systems show this is possible. Integration with existing payment systems must be seamless to encourage adoption; Stablecoin adoption illustrates this is possible. Regulatory frameworks must ensure compliance while preserving system benefits; we can and must do **much** better than banks at this, and methods are available to both preserve privacy while empowering law enforcement to capture offenders.

A two-year, \$10 million R&D program could deliver a functional initial pilot program. This investment would be recouped within *months* through reduced debt servicing costs once operational. Delay, however, costs Alberta \$23 billion annually in unnecessary interest payments: over \$63 million daily transferred from productive economy to financial intermediaries.

The cost/benefit ratios are compelling: for roughly 15% of the current **daily** losses paid to intermediaries, Alberta could position itself to have a globally unique offering: proven expertise in Wealth-backed Stablecoin technology, implementation and adoption.

Albertans could begin seeing economic benefits within 1 or 2 years. Within 2 or 3 years, global demand for secure Stablecoins to underpin corporate and government treasuries could create demand for Alberta Bucks far beyond even domestic usage. There is a real possibility that Alberta's vast commodity, energy and farming wealth could become a global reserve asset – if we choose to make it available to the world!

¹⁵Visa Onchain Analytics, Stablecoin usage growing globally

7.2 Pilot Program Opportunities

Strategic pilot implementations could demonstrate system viability while generating immediate benefits. Agricultural communities facing acute debt stress present *ideal* initial deployment opportunities. A pilot program focused on Alberta family farming operations could enable farmers to attest grain inventories and equipment, creating Alberta Bucks for operational expenses while retaining assets for production.

Small business districts in Calgary, Edmonton or Grande Prairie could pilot commercial applications, enabling businesses to monetize inventory and equipment for working capital without interest obligations. The immediate cash flow improvement would benefit many small businesses while identifying areas needing refinements.

Municipal governments could pilot infrastructure financing through wealth-backed Buck creation, funding community projects by attesting public assets rather than issuing interest-bearing bonds. A single \$100 million municipal infrastructure program could save \$50 million in interest costs over 20 years, providing compelling evidence for provincial-scale adoption.

7.3 Scaling to Provincial Implementation

Following successful pilots, provincial implementation requires coordinated development across multiple fronts. Legislative frameworks must establish asset attestation standards, insurance requirements, and redemption procedures. Technical infrastructure must scale to support millions of users and billions in transaction volume. Educational programs must help Albertans understand and utilize the new system effectively.

The implementation timeline could achieve meaningful impact within 2-3 years. Year one focuses on R&D and prototype development. Year two implements agricultural and small business pilots. Year three expands to municipal government participation. Year four enables broad consumer adoption for mortgages and vehicle financing. Year five achieves full provincial integration including government finance transformation.

With urgent concerted effort and focus, however, Alberta *could* implement this project on a much more rapid time frame. The cryptographic and distributed system tools are now available to build a prototype that is usable by technically savvy, willing, private communities of crypto-friendly asset holders. The legal frameworks exist to create private asset-backed tokens that represent attested (verified and insured) wealth ownership, and the constitutionally protected private contractual guarantees, liens and other legal remedies required to implement the necessary insurance tools are regularly exercised and sound.

Alberta can rise to this challenge, and summon the will, effort and funding to achieve rapid prototyping, testing and operation. We Albertans understand complex obstacles, set ambitious goals, and then *get things done*.

8 Conclusion: Alberta's Historic Opportunity

Alberta stands at a pivotal moment where technological capability, economic necessity, and political possibility converge to enable fundamental monetary reform. The province currently hemorrhages \$23 billion annually in interest payments that extract value without providing corresponding benefit. This represents the province's entire health care budget, or sufficient funds to eliminate provincial income tax while still having billions available for infrastructure investment.

The transition from debt-based to wealth-backed money creation would transform every aspect of Alberta's economy. Families would retain thousands annually currently lost to mortgage and

loan interest. Farmers would escape the debt trap that forces agricultural consolidation and rural depopulation. Businesses would access capital based on productive capacity rather than real estate collateral. Government would fund development through wealth attestation rather than debt accumulation.

The technical mechanisms exist. The legal frameworks are achievable. The economic benefits are quantifiable and massive. What remains is the political will to challenge entrenched financial interests and implement systems serving Albertans rather than extracting from them.

Every day of delay costs Alberta \$63 million in unnecessary interest payments. Every year of inaction transfers \$23 billion from productive economy to financial intermediaries. The government's responsibility to pursue the transformation is not merely important: it is urgent, essential, and historically imperative. Alberta must act now to prototype, prove, and implement wealth-backed money creation, or condemn future generations to perpetual debt servitude when liberation lies within reach.

The choice is stark: continue enriching distant financial institutions through interest payments and claims on assets, on money they create from nothing, or enable Albertans to create money backed by their own real wealth while retaining value within provincial communities. The moral, economic, and practical arguments align *unequivocally*: Alberta can pioneer wealth-backed money issuance to secure its economic sovereignty and prosperity, or follow the rest of the world down a dark path.

