PSP: A Global Mutual Credit Network to Transcend the Current Money System

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Abstract. A peer-to-peer mutual credit network would allow members to trade goods and services directly with each other without banks, interest, or unbacked money. Credit is created only at the moment of a real trade and extinguished once the seller spends it back into the network, meaning the total credit in circulation always matches the real goods and services available, which is why the system does not generate inflation. Credit limits are tied to each member's demonstrated sales, an insurance fund covers unpaid balances without disturbing other members, and surplus balances flow into interest-free longer-term lending rather than stagnating. The unit of account is anchored to a market basket of basic commodities, selected for how freely traded, essential, and stable in real value they are, so its value moves independently of government monetary policy and the speculative volatility that affects cryptocurrency. The network grows one node at a time, with each node capped at 150 members to preserve trust, federating through shared standards into a globally connected whole.

1. What is the problem with the current money system?

Today, almost all money is created by banks as debt. When a bank approves a loan, it does not hand over money that already exists, it creates new money on the spot. This is how nearly all the money supply comes into being, loaned into existence at interest. The money created this way is backed only by a promise to repay, not by any real goods or services entering the market.

Cryptocurrency is created through different processes, such as solving a computational puzzle in systems that use mining, but it shares the same gap: no real goods or services enter the market when new units are created.

This paper calls any currency created with no real goods or services entering the market at creation, whether through bank lending or methods like cryptocurrency mining, unbacked money.

Interest is a fee charged for the use of borrowed money. The deeper problem is that only the principal of a loan is created, never the interest. Borrowers, businesses, and governments are forced to compete for a limited pool of money just to cover interest payments that were never created in the first place. Debt grows faster than the money supply available to pay it back. The scale of this shows in US government debt alone: it stood at roughly $10.8 trillion in 2009 and has surged to more than $39 trillion in 2026.

Money created as debt also drives inflation. Inflation happens whenever new money enters the money supply without being tied to goods or services entering the market, something banks and governments both have the power to do. A currency can still appear strong compared to other currencies while losing purchasing power against real goods at the same time. For example, the US dollar has lost over 90 percent of its purchasing power since its original silver benchmark that was established more than 200 years ago.

Money created as debt persists because it has real structural advantages: universal acceptance, deep habituation, and heavy legal protection. Cryptocurrency persists for different reasons, mainly speculative demand, which creates its own problem: a value that can swing sharply within days with no connection to any underlying production. What is needed is a system that protects purchasing power from both inflation and speculative volatility, eliminates interest fees entirely, and operates without any central control. That is what the Proven Success Protocol (PSP) is designed to build: a peer-to-peer mutual credit network.

2. What is Mutual Credit?

Mutual credit is a system where people trade goods or services with each other using a shared ledger instead of unbacked money. A peer-to-peer mutual credit network is the group of people who use this system together, without any single boss, bank, or central company in charge.

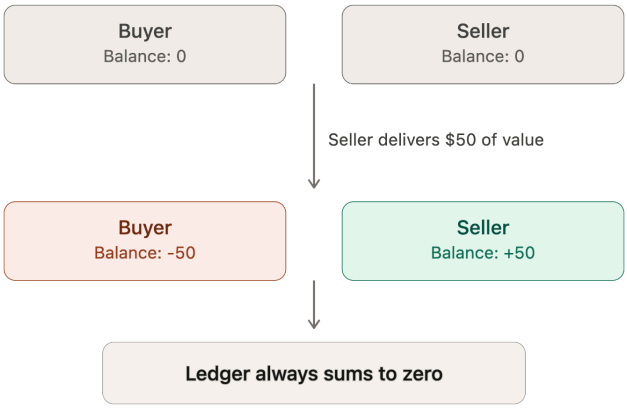
Banks rely on a mechanism similar to mutual credit when they settle claims among each other: claims go to a central clearinghouse, and only the net difference is settled. Mutual credit applies this same process directly to the whole community of buyers and sellers. The WIR Economic Circle Cooperative, founded in Switzerland in 1934

during a period of severe monetary scarcity, has used this netting principle for nearly a century. WIR is commonly cited as mutual credit, though new WIR francs are issued through collateral-backed loans from the WIR Bank itself (functioning as a central bank for its closed loop) rather than peer-to-peer between members. Sardex, founded in 2009 in Sardinia, is a closer match to true peer-to-peer mutual credit: members issue interest-free trade credit directly to one another with no collateral, and it helped local businesses raise worker pay and invest in growth even during the Eurozone financial crisis.

This community ownership echoes a long tradition of mutual companies, with no stockholders and existing solely to serve their own members. Mutual credit simply extends that same member-owned principle to the act of trading itself.

Money does three separate jobs: serve as a medium of exchange for payments, a store of value for preserving wealth, and a unit of account for measuring worth. But these jobs conflict. Something you spend to keep the economy moving works against something you hold to preserve wealth: spending it puts it back into circulation, while holding it takes it out. And a currency whose value keeps shifting, whether from inflation or from speculation, cannot reliably measure value at the same time. Unbacked money tries to do all three at once, and the conflict between these jobs is never fully resolved. Mutual credit separates these roles instead of forcing one thing to do all three. The shared ledger handles the medium of exchange, since credit moves the instant a trade happens. The unit of account is anchored to a fixed physical basket of goods, independent of what governments or banks do to their currencies, so worth is measured the same way over time. The store of value role is handled differently on purpose: credit is not meant to sit idle and hold wealth by itself. Surplus balances instead get put to work funding other members' production, which is explained later in this paper.

Mutual credit makes the symmetry between producers and consumers explicit: aggregate activity on the ledger is visible to all members, and everyone starts at zero. Buyers go negative, since they now owe the group. Sellers go positive, since the group owes them. No interest is ever charged, the system always balances to zero, and credit limits, calculated as explained later in this paper, stop anyone from borrowing too much. This works through multilateral clearing: what one member owes can be offset by what another owes them, so debtors effectively pay creditors through the shared pool, with no bank needed.



A mutual credit network's value grows as its membership grows, the same way a telephone network becomes more useful as more people are connected to it. But growth only works if two design principles hold. First, credit must be issued on a sound basis: it should only exist because a member has real goods or services to offer in return, and must ultimately be redeemable for them. Second, credit lines must reflect actual productive contribution, with the largest lines going to established members whose goods are already in high demand. These will be discussed in the later sections.

A third principle, supported by decades of real-world experience with mutual credit systems, is that a node should not launch as an open enrollment system for individuals. Every historical mutual credit and community currency system that launched primarily to individuals and grassroots participants, rather than to established local businesses, has eventually declined and ceased operating, even when well designed and well intentioned. By contrast, the systems that have sustained themselves over decades, such as the WIR Economic Circle Cooperative in Switzerland and Sardex in Sardinia, both launched with a base of registered, established small and medium-sized enterprises already in place before wider participation was encouraged. Sardex in particular accepts only companies with a registered local office and deliberately avoids accepting too many members offering the same goods or services early on, so that real demand for what each member sells already exists inside the node from day one. A new node should therefore be seeded with a founding group of established local businesses across multiple lines of trade before it is opened more broadly, rather than starting from a blank membership of individuals with nothing yet to trade.

3. How does the app work?

The network's tool for putting mutual credit into practice is a shared app owned and governed by its members. The app has four components: a marketplace for displaying offerings and negotiating trade, an independent means of payment through direct credit

clearing, a social network for building identity and trust, and a stable measure of value not tied to any political currency, covered in detail in the next section.

The app gives each member a simple dashboard showing their balance, recent trades, listings, and what others are offering. A new member signs up, lists what they have to offer, and starts at zero credits. No existing cash balance is required to begin trading. A buyer selects a seller, confirms the amount, and the ledger updates instantly with no bank or any third party involved. The buyer's balance goes negative by the amount of the trade, and the seller's balance goes positive by the same amount. The seller has just earned credits redeemable for anything else in the network. Every trade completed builds a positive sales history that expands the member's credit limit over time, meaning the more a member participates, the greater their ability to buy from others in the network without using cash. Credit limits are tied directly to what a member can realistically repay through future sales, calculated as explained in the next section, so no member can be pushed into a debt they cannot work their way out of.

The social network component gives each member a visible profile: credentials, trading history, and a reputation rating that updates automatically with every completed trade. This lets members judge whether to trust someone they have not personally traded with before, supporting trust within a node, the local group of up to 150 members described in the next section, as it grows toward its membership cap.

Listings must reflect real goods or services available now or very soon, since a credit spent on a promise that is never fulfilled creates a claim on the network with nothing real behind it, which is the same mechanism that causes inflation in money created as debt.

Without visibility into aggregate balances and trading volume, members have no way to verify that the credit circulating in the network is backed by real activity. To address this, every member can see aggregate balances and trading volume through transparency tools built into the app. These same tools let members flag disputes and propose new participants, supporting the network's health as it grows.

The network operates as a barter exchange under existing law in whatever jurisdiction it operates in. Most jurisdictions with developed tax systems already have a legal framework for reporting barter income. Barter exchanges are required to report member transactions to tax authorities, and members must include in their gross income the local currency value of all credits received during the

year, calculated at the fair market value of each credit at the time of each transaction. The app automatically generates a complete annual transaction record for each member, showing what each credit earned and spent during the year was worth in local currency based on a basket of everyday goods that sets the credit's value. Members use this record to meet their local tax reporting obligations in their own currency.

4. How does the whole mutual credit system work?

The mutual credit system relies on a few core mechanisms to stay stable as it scales. The first is a limit on how much credit each member can hold: without agreed limits, a member could draw more credit than they can realistically repay through future sales, which would leave other members holding credits that cannot be redeemed. To prevent this, each member's limit on negative balances is set at roughly three months of average sales, since the average business turns over its inventory about four times a year, meaning roughly a quarter of annual production is available in the market at any given time. Matching the limit to that window ensures every credit issued can realistically be redeemed within a normal trading cycle. A negative balance is simply a record that a member now owes the group real goods or services in return for what they already received, redeemed in kind once any member delivers value back into the network. Because some members will inevitably leave the network with a negative balance they never cleared, the network maintains an insurance fund, funded from a small portion of the membership fees described below, used to write off those unpaid balances without disturbing other members' credits. Any surplus beyond what losses require is returned to members, so the fund never becomes a hidden charge in disguise.

Operations are funded through an initiation fee scaled to the size of the member's business, and an annual membership fee likewise scaled to business size and trading volume. No fees are charged on individual transactions. This structure, proven by Sardex, incentivizes members to trade as much as possible within the network to maximize the value of their fixed membership cost, which in turn increases the network's overall trading volume and health. One known risk of this model is that some members may underreport their business size to pay a lower tier. This is addressed by tying membership tiers directly to verifiable trading activity inside the network: if a member's actual trade volume consistently exceeds what their membership tier allows,

the app automatically flags the discrepancy and adjusts their tier accordingly.

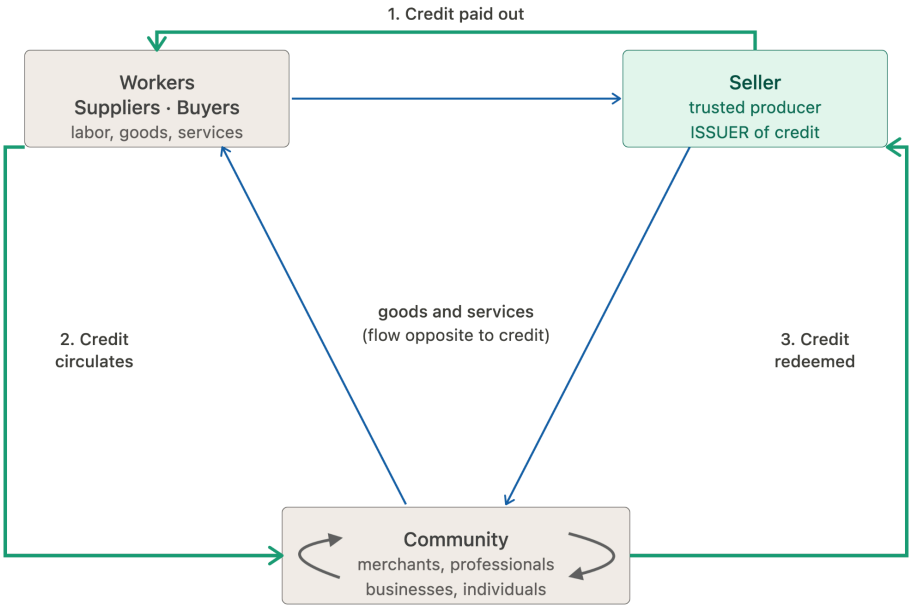
Each member holds two accounts: a current account for day-to-day trading, subject to both a negative balance limit and a positive balance limit, and a capital account where surplus credits automatically move once the positive limit in the current account is reached. The negative limit prevents a member from spending more credit than they can realistically redeem through their own goods or services. The positive limit prevents a member from hoarding credits and stopping the flow of trade. Moving surplus credits into the capital account once that threshold is crossed keeps them in productive use instead of idle in someone's current account.

All members' capital account balances are pooled within the node, the local group of up to 150 members explained later in this section, and allocated by a node-level investment committee to members who need financing for longer-term needs like equipment or renovation, on interest-free terms with a small insurance fee, separate from the current-account insurance fund described above, covering default risk. No single member unilaterally decides who receives a loan, though concentration of capital itself is a separate risk addressed in the open design challenges below. Because there is no interest, a large capital account balance earns nothing passively; it only grows by continuing to deliver real goods and services others want, which is a contribution rather than an extraction. This keeps credits circulating rather than stagnating, and gives surplus holders a way to put their earnings to productive use within the network.

Node operations cannot rely solely on volunteer labor once a node grows beyond its earliest stage. Mutual credit systems that depended entirely on volunteer administrators to record trades, manage disputes, and onboard new members have consistently lost momentum as that volunteer base became overworked and fatigued, even when membership and enthusiasm were initially strong. Systems that sustained themselves over the long term instead employed paid staff to actively support members, for example by helping arrange trades for members with high earning capacity, supporting onboarding, and maintaining the integrity of the ledger. Each node should therefore budget a portion of its membership fees toward paid, accountable staff responsible for these functions once the node reaches a size where volunteer effort alone is no longer sufficient, rather than depending indefinitely on unpaid administrators.

The diagram below shows the complete circuit of issuance, circulation, and redemption of credit. Reciprocity occurs only upon

completion of the circuit. Note that credit flows in one direction while goods and services flow in the opposite direction, and that the original issuer eventually redeems the credit they issued by accepting it back as payment for the goods or services they have to sell.



Credit circulates until someone uses it to pay the issuer, then it is extinguished.

In this network, any member can occupy the issuer role, but only if they are ready, willing, and able to redeem the credit they issue by delivering goods or services that are in everyday demand, available now or in the near future, and offered at competitive prices. Credit issued without this backing has nothing pulling it back to the issuer, and a credit that cannot be easily redeemed will be refused or discounted by other members until it loses its value entirely.

If only one type of business joins, members will quickly run out of things to spend their credits on, since the rest of the supply chain remains outside the network. Credits that cannot be spent on everyday needs will pool and stagnate rather than circulate. To prevent this, the network recruits across every level of the supply chain: if a retail business joins, the network should recruit its wholesaler, then the manufacturer who supplies that wholesaler, and eventually the workers and end customers who complete the loop, so credit can flow in a full circle.

The network is designed to grow one node at a time. A node is a local group of no more than 150 members, kept small deliberately because research on human group dynamics shows that trust and self-regulation work reliably within groups of this size and break down beyond it. A single founding node reaches stable trading volume first.

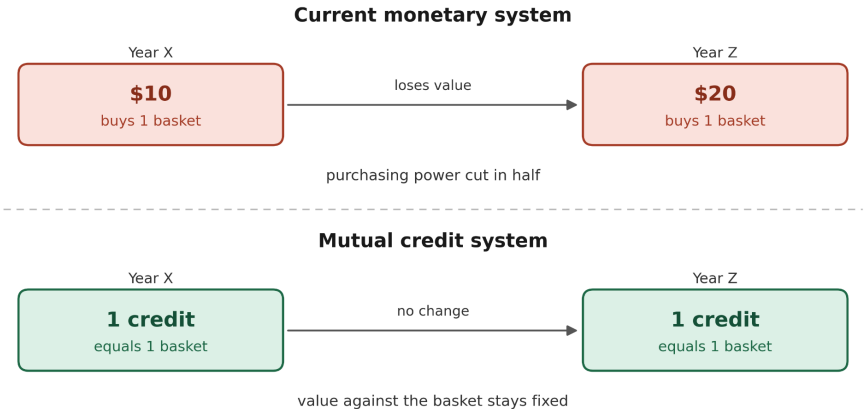
Then a second node forms in a neighboring area, then more nodes form across the city, then the region, then the country. Each node is locally trusted and connected to the others through shared standards that guarantee equal credit value across the network. Independent nodes can also associate into wider networks, so a member in one node can pay a supplier in a partner node without any conversion. Once a country has a stable network of nodes, the same pattern begins in other countries. The long-term goal is tens of millions of nodes worldwide, each locally governed and globally connected, forming a network large enough that trading within it becomes more useful to its members than using unbacked money outside it.

If the unit of account of one credit in each node is priced equal to the local national currency, one credit will eventually lose its purchasing power. The more durable approach, as Thomas H. Greco Jr. proposes, is to anchor the unit to a market basket of basic commodities. Greco recommends selecting commodities that are freely traded in open markets, significant in world trade volume, important to satisfying basic human needs, relatively stable in real price over time, and uniform in quality, so the basket reflects durable, widely needed goods rather than any single volatile commodity.

The basket is defined as a fixed physical quantity of everyday goods, for example a specific weight of grain, fuel, and metal chosen at the network's founding under these criteria. Those quantities are fixed permanently and do not change. What changes over time is how much local currency is needed to buy that basket. For example, if 1 credit unit equals a basket containing 10 kg of grain, and that basket costs $10 at the network's founding, then 1 credit unit starts at $10. If inflation hits and the same basket now costs $20, the credit unit is worth $20 in local currency terms, while the dollar has lost half its value against that basket. The basket serves as a measure of value, not a redemption promise. A member is not guaranteed the specific commodities in the basket on demand. Instead, the basket is a benchmark other members can use to judge whether a credit is holding its value, and as Greco notes, members remain free to favor whichever credit or currency proves most stable in practice.

This same anchoring also protects against the volatility that affects cryptocurrency: since the credit's value tracks a fixed quantity of real goods rather than speculative demand, it does not swing in value the way crypto does. Because the basket is defined in physical quantities rather than in any political currency, two nodes in different countries that adopt the same basket definition can trade directly with each other without a foreign exchange conversion, since they share a

common, politically neutral measure of value. This removes the need for currency conversion, though it does not by itself equalize differences in cost of living between countries, which is addressed in the open design challenges below.



These examples of open design challenges are slated for future development in collaboration with the broader mutual credit community.

- While the split payment model, in which a transaction is settled partly in credits and partly in local currency to cover tax at the point of sale, is legally verified and sound, automating it fully requires the community to establish a legal entity registered as a withholding agent in each jurisdiction, capable of remitting tax payments to government authorities on behalf of members.
- Trading between nodes in countries with significantly different costs of living creates structural imbalances that the shared commodity basket alone does not resolve, and a cross-border credit hub system with appropriate exchange mechanisms is needed to prevent wealthier communities from drawing disproportionate value from lower-income ones.
- The current transparency and dispute tools handle straightforward contract breaches, but a more robust community-governed mechanism for evaluating all kinds of work, one that cannot be gamed by any single group of members, is needed as the network scales.
- Long-term participants who stop working see their positive balances drain without replenishment, which discourages sustained participation over decades. A pre-paid lifecycle contract is one candidate for this: a member exchanges surplus credits now for a fixed real quantity of goods or services per year, guaranteed for a chosen number of years, and may retire once they judge those

contracted years sufficient to cover the life they want. Backing this against a single enterprise creates fragile risk if that enterprise closes, so an association-based structure, in which multiple enterprises offering the same kind of goods or services jointly guarantee delivery, is being explored. How associations would form, verify their combined capacity to deliver over multi-decade contracts, and handle enterprises joining or leaving over time remains unresolved.

- In the two types of accounts that members have, the current account has an explicit balance ceiling, but the capital account does not. Without a cap, a single highly productive member could accumulate a disproportionately large share of the node's lending pool over time, concentrating governance influence even without earning interest. Designing an appropriate ceiling for capital account balances, and deciding what happens to surplus beyond that ceiling, remains an open question.

5. What are the benefits for all kinds of people?

The people this system serves most directly are those who have the most to lose from inflation and the least access to money.

Retirees and anyone on a fixed income are hit hardest by inflation, since pensions and savings lose real value every year prices rise, even though the number on a bank statement never changes. In a mutual credit network, an earned balance is a real claim on goods and services from other members, not a number that loses value because of currency debasement happening elsewhere in the economy. Sustaining that claim across a long retirement, rather than spending it down with nothing to replenish it, is one of the open design questions described in the previous section.

Ordinary workers and small business owners are also disadvantaged under money created as debt, since large corporations can raise prices immediately to protect margins while employees and small suppliers must wait to renegotiate wages and contracts. Mutual credit gives these same workers and small operators a market where what they earn keeps its value inside the network instead of eroding while they wait. It also unlocks excess capacity: most small businesses could sell more than they currently do, not because demand is missing, but because their potential customers lack the money to pay. Mutual credit solves this by giving customers a way to buy with credits earned from their own sales, without borrowing from a bank, which matters because small and medium enterprises represent 99

percent of all businesses and about 60 percent of employment in developed economies, yet access to finance remains one of their top obstacles to growth.

Even people with significant accumulated wealth face a problem with unbacked money, whether fiat or cryptocurrency: their holdings depend on continued government policy, market confidence, or speculative demand to hold their value, rather than on a direct claim to real goods or services. A mutual credit balance, by contrast, is a direct claim on real goods and services from other members, one whose value does not depend on central bank policy, government fiscal decisions, or speculative market demand. For large capital holders, this represents a portion of wealth that remains stable in real terms regardless of what happens to the currencies around it, though how large capital account balances should be capped to prevent disproportionate influence over a node's lending pool is one of the open design questions described in the previous section.

6. Conclusion

We have proposed a system to trade goods and services without losing purchasing power to currency debasement, without getting charged interest on credit, and without a central authority in control. The network is simple in its design. Every credit traces back to a real trade. Every limit traces back to what a member can actually deliver. Aggregate trading activity is visible to the whole community. The ledger is governed by its members. No fee accrues to any intermediary for its use. Participation is voluntary. A new member joins with nothing, lists what they have to offer, and can begin trading the same day without touching a bank. As the network grows, node by node and country by country, the credits circulating within it become increasingly useful and worth holding, since their value is tied directly to the real trade that created them rather than to monetary policy decisions or speculative market demand.

Further Reading

- “The End of Money and the Future of Civilization, New 2024 Edition” by Thomas H. Greco Jr.