Compound interest rates have a huge impact on our lives, socially, economically, and environmentally. Yet this issue is seldom discussed let alone analyzed. The sheer mathematical facts reveal what the compounding of interest over short intervals does to governments, small businesses, and households for the benefit of global banks. In ordinary circumstances, a debt at 3% compound interest will double in 24 years; at 6% will double in 12 years; and at 12% will double in 6 years. Thus with a variable rate interest on a 25-year mortgage, homeowners frequently pay three to four times the sum they borrowed in the first place. If payments are missed, penalty charges, default fees, and interest charged on interest can escalate costs higher still.

The Latin origin of the word “mortgage” – “grip of death” – spells out the dangers that the debt treadmill involves. The more people owe creditors, the more they have to work to pay it off. Forty years ago, mortgages were mainly paid by one wage-earner. Now it takes two earners to keep pace with the treadmill.
The word “mortgage” derives from two Latin words, morte (death) & gage (pledge), or “grip of death.” Historically, a mortgage was the last resort of a landowner or farmer. You would only mortgage your land in extreme circumstances, precisely because of the risk of losing a secure means of subsistence — thus threatening the loss of life & the well-being of rural communities. In Hebrew the word for usury is neshek, meaning “to bite & to devour overtime.”

Additionally, over the past three decades deregulation of credit has led to a free market in high-risk borrowing and lending. Mortgages, once limited to three times the household income of the borrower, catapulted to 5-6 times income. In the U.S. even these multiples were disregarded in the run up to the credit crunch of 2006. “Ninja lending” practices were rife, advancing mortgages to households with “no income, no job and no assets.”

Just as disturbing has been the increase in the average working week over the past 20 years. Not coincidentally, this rise has coincided with a rise in the debt-to-income ratio of British households to the highest in the world and in history (about 180%). The evidence in Britain indicates that shopping and convenience foods serve as a relief from debt-related overwork. Insidiously, debt drives people to work longer and consume more, and thereby generate even more debt and less time.

For such reasons, religious laws have proscribed usury — making money out of money — for over 4,000 years. The legalization of usury has been comparatively recent. Until 1977 the maximum legal interest rate in Britain was 48%. Now payday lenders on commercial strips in London and Manchester legally quote annual charges of 1500-2000%.

The past 40 years of globalization has been described as the era of “financialization” because of the colossal growth in the influence of global banking on the world’s economy. From the 1960s to 2005, a period of growing government and household indebtedness in the U.S.A. and Britain, also witnessed an increase in the share of the financial services industry in total corporate profits from about 10% to 35%.

Debt-driven growth is unsustainable not just from a microeconomic perspective; it is undermining the real economy. Debt, manufactured by banks without the backing of real assets, and inflated over time through the “magic of compound interest,” redirects the wealth created by people working in the productive economy to creditors in the form of interest payments.

Margrit Kennedy’s research in the 1980s confirms how the cost of compound interest is embedded in the cost of living throughout the German economy. Her analysis suggests that up to 50% of the costs of essential goods could be traced to compound interest: 12% of the cost for rubbish collection and 70% in the case of public housing, two of many examples she cites. The result is a significant inflation of the cost of living and increasing income disparity. Researcher Helmut Creutz affirms that interest payments in 2000 represented at least a third of the expenditures of every German household (over three times what they paid in value-added tax), constituting a massive daily transfer of wealth to the 10% of households that own most of the nation’s interest-bearing assets. This mechanism is also responsible for the fact that the growth rates of Germany’s GDP (600%) and net incomes (300%) between 1950 and 2000 were completely outdistanced by that of its money supply (2600%).

The steadily rising ceiling on permissible lending rates (or in the case of the U.K., the lack of any ceiling whatsoever) accelerates this process. In the U.S., more than one in four low-income households spends over 40% of its income to service debts. The deregulation of the credit markets in the U.K. and the U.S. has led to a proliferation of fringe banks that can legally charge fees ranging from 80% for secured pawnbroker loans to as much as 2000% for payday loans. Sub-prime mortgage lenders charge fees that for centuries would have been regarded as extortion.

The social costs of compound interest continue to mount. In the U.K., housing foreclosures were over 40,000 in 2008 and are projected to rise to over 100,000 in 2011. In the first quarter of 2009 bankruptcies and personal insolvencies reached an all-time record in the U.K.

Are there interest-free financing mechanisms that can enable households and communities to return a measure of sanity to the financing of basic needs? Might credit unions and social banks internationally learn from such an approach?
A Brief History of Interest-Free Finance

Credit unions originate in rural action to combat usury. The first credit union was founded in 1849 in a rural town in the German Rhineland where farmers were losing their cattle to lenders and having to sell their land to settle debts. As a solution, Friedrich Raiffeisen, the local mayor, proposed a savings and lending co-operative. As with other co-operatives, a savings dividend acted as the members’ incentive to save. This experience formed the model for the international credit union movement.

There have also been co-operative and mutual experiments that did not use dividends or interest rates to incentivize savings. In 1775, Richard Ketley, a Birmingham publican, set up a mutual savings fund on rotational principles to allow savers to put aside money to build a house. Members periodically drew lots to allocate funds until in due course every saver had received a capital sum to build a home, and the fund was terminated. This system gave rise to the building society movement internationally and inspired the mutual savings and loan movement in North America.

In the 1840s, another Englishman, Thomas Bowkett set up similar rotational savings societies in order to allocate smaller loans to savers. Like the first “terminating” building societies, these Starr-Bowkett societies did not use a dividend or an interest rate to persuade people to save. They operated successfully for decades, spread to Australia and continued to trade until the 1960s.

Behind all these experiments was a deeply rooted, ethical social investment movement. The co-operative pioneers in fact were all seeking viable alternatives to avoid the usurious practices of banks and pawnbrokers. In the 1850s in the U.S.A., Edward Kellogg and William Greene set out practical proposals for interest-free mutual banks.

In Denmark in the 1930s, another group of farmers facing repossession by banks set up a system that continues to operate successfully today. Building upon earlier practices of interest-free systems in Germany, Christian Christiansen championed the founding of a number of rural savings and loan co-operatives that went by the acronym JAK, short for Jord Arbete Kapital (“Land Labour Capital”). The personal savings and community benefits that have accrued to members of this democratic co-operative finance system are testimony to the dramatic impacts that can be realized by moving from charging compound interest to a fee-based approach to lending.

Sweden is now home to the largest number of JAK branches and members. Started in 1965, the co-op expanded rapidly in the late 1980s and secured a banking license in 1998. Today JAK has 35,000 members in Sweden, US$163 million in assets, and $147 million out on loan. It operates on the basis of mutual aid and financial reciprocity amongst its membership. JAK members agree to pool their savings and then lend them to one another, interest-free, for mortgages, home improvement, student loans, etc.

JAK Bank is based in Skövde but has 30 local branches and a large number of JAK member groups across the country. To keep overheads low, the local branches rely heavily on the assistance of 650 community-based volunteers, trained by JAK staff in interest-free lending.
principles and practices. These volunteers recruit new members through the JAK newspaper and educational events in the local areas. Volunteers can tap into a number of JAK systems to assist them with community engagement, including internet services and on-line forums. A JAK school conducts courses for volunteers and members.

**JAK’s Core Beliefs & Values**

The high level of volunteer commitment is not explainable simply by the cost savings that JAK members enjoy.

First, JAK members agree that the cost of compound interest embedded in the cost of goods amounts to an indirect taxation of ordinary citizens by the wealthy. This is seen as antithetical to the common good of the household, the community, and the nation.

Second, they believe that compound interest fuels the short-term perspective that only projects yielding a higher profit than prevailing interest rates are worthy of investment. This leads to an overemphasis on large-scale projects (shopping centres, etc.) or high-yielding, short-term projects, (e.g., extracting finite natural resources) at the expense of long-term, financially lower-yielding projects (e.g., alternative energy, ecological farming, etc.).

Third, unsustainable economic growth is fuelled by the pressure to service compound interest costs. Herman Daly, former chief economist of the World Bank identifies this single factor as key to the exponential growth of debt in the economy and an important contributor to unemployment, inflation, and degradation of the natural environment.

Fourth, interest charges represent a depletion of life’s energy. JAK members would agree with John Ruskin that “wealth is life.” Households, communities, and governments freed of the burden of interest costs can reinvest time and money in enlarging the round of life – nurturing well-being and fulfilling livelihoods. They are also freed, in the view of Mark Anielski, “to re-establish a healthy relationship with money so that it is no longer a store of value (something to be hoarded) but a genuine medium of exchange among households and businesses to build real wealth and sustainable and flourishing communities.” These core beliefs and values are reflected in all the aspects of the JAK’s governance and management activities.

**How the System Works**

Operationally, the Swedish JAK is very similar to a credit union, except that members do not earn any interest on their savings or dividends on their shares. There is also a compulsory savings element. By foregoing interest and dividend income, members are entitled to fee-based loans at no interest. The total cost of a JAK loan is structured to cover four things:

- loan appraisal and set-up cost at a fee that is 2-3% of the approved loan value.
- an annual administration fee equalling 1% of the loan.
- an annual fee of approximately USD$30 to support the JAK educational system and volunteer services.
- an equity deposit equal to a 6% of loan value to cover risk on any loan in the portfolio. Equity deposits serve as the bank’s reserves and legally belong to the bank until the loan is fully repaid. If there has been no default, the deposit is then repaid in full to the member.

The JAK maintains 20% of equity deposits in government treasury bills as a hedge against any unexpected withdrawal of savings by members. Bad debt has been kept below 0.5%, which also helps to keep loan costs so low.

To develop and maintain liquidity, members are strongly encouraged to pre-save in order to qualify for a loan. This used to be a requirement in the Swedish JAK but in 2003 that was rescinded in order to enable lower income members to qualify for loans. Members can also contract to continue saving while they are repaying their loans. This is called post-saving and it is structured as a separate savings contract that runs alongside the loan contract. By committing to continued savings while the loan is paid down the member can negotiate a larger loan right from the outset.

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**Diagram: JAK Loan Profile**

By agreeing to post-save, JAK members can increase the loan for which they are eligible.
New members receive an account immediately. Savings flow into a common pool, but instead of receiving interest, each member earns savings points – one point per dollar saved each month. Savings points give a member the right to borrow without interest. The amount that a member can borrow is based on the number of savings points accumulated (pre-savings) or contracted (post-savings). Savings points are key to JAK’s ability to maintain liquidity in the system, which in turn is key to making interest-free loans available for a growing membership.

The diagram on the previous page uses British pounds to depict how post-savings are calculated and combined with pre-savings to match the overall sum that is to be borrowed.

Pre-savings of £2,000 during a 12-month period prior to applying for a loan would entitle a member to borrow only a maximum of £2,000 over a similar term. However, the member could borrow an additional £3,000 if s/he agrees to continue saving (the post-saving contract referred to above) while repaying the loan over a 48-month term. (See Table 1 at right.)

Many readers may question such a system, in particular the opportunity cost of receiving no interest on their savings or dividends on their credit union shares. This is precisely where accessing credit based on payment of a fee shows its superiority to credit based on compound interest.

When you consider the implications of a $US20,000 loan over 10 years, the cumulative financial benefits to JAK members become very clear. (See Table 2.) The JAK borrower enjoys net savings of $6,669 over someone who gets a loan from a conventional bank. While the JAK borrower saves a large amount of money in interest costs his/her current monthly payments are higher than those of a conventional bank customer. This is because the monthly loan payment has to be matched by a post-savings payment. In the example below, the member pays $166.79 in the monthly loan payment, an amount that is matched by an additional $166.79 in compulsory savings.

Thus the JAK loan recipient has higher monthly payments because s/he is both paying off the loan and having to save the same amount. ($355.84 compared to $241.18). This is quite a bit more money in annual payments – about $2,000 more. However, that extra $2,000 annually, which will amount to $20,000 over the 10-year term of the loan, is the member’s money. All of it comes back. Thus, the person or business receiving this 10-year loan has saved $6,669 in interest and also saved $20,000 dollars. Given the very low interest rates that savings accounts currently earn, the opportunity costs are minimal.

The average size of a loan in the JAK system is US$15,000. The largest loan thus far is nearly $1 million. The aim of the JAK management is to run a stable operation on a nonprofit basis. They do target a profit of $140,000 each year, which if achieved, is added to the bank’s equity.

In order to keep credit transaction costs and default rates low, JAK loans above $16,000 are secured against assets. About 80% of JAK loans are for home improvements or to refinance high interest loans originally obtained from banks, including student and consumer loans as part of the mix. About 20% of loans are advanced for local ecological projects or to support social enterprises. Nine in ten loans are made to individuals and the remainder

### Table 1: Comparative Loan Costs

<table>
<thead>
<tr>
<th>Charges on 10 year loan</th>
<th>Conventional bank loan at 8.05% over 10 years</th>
<th>JAK loan over 10 years</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Loan financing fee</td>
<td>0</td>
<td>$2,701</td>
<td>$22 per month over 10 years</td>
</tr>
<tr>
<td>Equity deposit (6% of loan)</td>
<td>0</td>
<td>$1,200</td>
<td>Paid up front, but reimbursed within 7-19 months of loan retirement</td>
</tr>
<tr>
<td>Annual membership fee</td>
<td>0</td>
<td>$339</td>
<td>$33.90 per year</td>
</tr>
<tr>
<td>Annual service fees</td>
<td>$400</td>
<td>0</td>
<td>$40 per year</td>
</tr>
<tr>
<td>Interest cost on loan</td>
<td>$9,309</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Total cost of loan to conventional borrower</td>
<td>$9,709</td>
<td>$3,040</td>
<td>Total cost of loan to JAK borrower</td>
</tr>
</tbody>
</table>

### Table 2: Comparative Loan Payments

<table>
<thead>
<tr>
<th>Payments on 10-year loan</th>
<th>Conventional Bank loan at 8.05%</th>
<th>JAK Bank (assuming no pre-savings)</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monthly Loan Payment</td>
<td>$241.18</td>
<td>$166.79</td>
<td>No interest</td>
</tr>
<tr>
<td>Post-Savings Monthly Payment</td>
<td>0</td>
<td>$166.79 (2,001 per year)</td>
<td>This would be less if a pre-savings balance has been accrued. $20,000 saved is recoverable three months after loan is paid off.</td>
</tr>
<tr>
<td>Loan fee payment</td>
<td>0</td>
<td>$22.51</td>
<td>Monthly contribution to 2.5% loan fee</td>
</tr>
<tr>
<td>Total Monthly Payment</td>
<td>$241.18</td>
<td>$355.84</td>
<td></td>
</tr>
</tbody>
</table>
was set up in support of Fjällbete, a co-operative whose mandate encompasses the rural industrial and educational aspects of Ekokött and Hornbore. See photos, pp. 53, 56.) This simple system enables people autonomously to mobilize their collective savings for projects they consider worthwhile. Community benefit enterprises are being fostered, many of which advance transition to a more sustainable economy and most of which have been refused conventional, interest-based financing. And it comes with a clear advantage: savings is a less costly request to respond to than a regular donation. JAK makes it easy for people to set up savings accounts targeted to finance a social or ecological enterprise. In addition to administering these accounts, the savers vet the projects themselves, adding to the security of the savings. This simple system enables social solidarity to be channelled efficiently and effectively.

Recently JAK extended the LEB approach through a program partnership involving three Swedish local authorities. It has mainly been designed for small ventures and community associations that can afford to pay the JAK loan fee and the capital installments but little else. Like all other JAK lending operations, these loans have to be balanced by savings.

Fifty social enterprises have been financed to date. The largest is a $10 million community-based wind power co-operative.

The JAK co-operative bank operates inversely to virtually all conventional financial institutions. First, like credit unions, it is member-controlled and -governed. Second, it charges no interest. Third, it targets a modest annual profit whose purpose is to strengthen the co-op’s equity on the balance sheet. Fourth, it has over 650 volunteers that actively promote and educate people in the basics of interest-free lending. Fifth, it combines a highly professional, centralized, technically competent office with a small

In Summary

The JAK co-operative bank operates inversely to virtually all conventional financial institutions. First, like credit unions, it is member-controlled and -governed. Second, it charges no interest. Third, it targets a modest annual profit whose purpose is to strengthen the co-op’s equity on the balance sheet. Fourth, it has over 650 volunteers that actively promote and educate people in the basics of interest-free lending. Fifth, it combines a highly professional, centralized, technically competent office with a small.
staff that facilitates dispersed lending activity through electronic means. The cost of management per member is very low: $144 in 2002. Sixth, in the LEB it has created an enterprise financing vehicle that is member-driven, decentralized, flexible, and capable of inspiring and channelling savings to community-wide benefit. Seventh, every loan is backed by real assets – other member’s savings – and 20% is maintained in Swedish treasury bills for safety and to supplement earnings. This is diametrically contrary to conventional banks, that loan $20 or more for every dollar on deposit.

Transition to such a system is not a simple matter. The redefinition of the purpose of banking is counter-cultural. Attitudes grounded in a view of money as a “store of value” coupled with the temptation to maximize profit by making money out of money are not going to magically disappear. Indeed, current indications are that returning to business as usual in the financial world is a major preoccupation of most conventional bankers.

Nevertheless, more and more people have come to understand that they are vulnerable to an unaccountable, non-transparent financial system whose primary interest is shaped by shareholders expecting high returns and managers seeking large annual bonuses. These consumers represent the basis for replicating and scaling up a JAK model. Credit unions represent the most obvious starting point. They are democratic and can be influenced. Their roots still lie in social justice, co-operation, community outreach, education, and members helping members meet basic needs – however obscure that connection may seem at times. A wholesale change to interest-free financing will not be possible overnight. However, for credit unions to establish an account facility and a staff capacity to provide this service would be a huge step in the right direction.

And timely step, too. As Jeff Rubin has said, our world is about to get “a whole lot smaller.” As the price of fossil fuel escalates, it will become more and more important to enhance our capacity to finance food production and processing, energy conservation investments, and renewable energy development in the localities and regions where we live.

The JAK model offers a unique capacity to facilitate and mobilize solidarity savings. Local means by which people can invest in the local capacity to meet basic needs is an innovation that needs to be adapted and scaled up. If communities are to become active agents in planning and adapting to the age of energy descent and climate change, the JAK model is one strategic pathway to a future that works.

References


10. Anielski, p. 10.


This article is based on a chapter for a book about community transition in an age of Peak Oil and climate change that is currently being prepared by PAT CONATY and MIKE LEWIS. Pat is a Research Fellow at the New Economics Foundation, London, England. He is also a collaborator in the BC-Alberta Social Economy Research Alliance (BALTA). Contact him at pat.commonfutures@phonecoop.coop. Mike is Executive Director of the Canadina Centre for Community Renewal, a founding member of the Canadian CED Network (CCEDNet), and lead investigator in BALTA. Contact him at 250-735-6591 or cceLewis@xplornet.com.

(Photos, previous page) School children at one of the many events Fjällbete offers to reconnect people with the land and food supply. Fjällbete currently has 140 members (restaurateurs, farmers, butchers, craftspeople, hoteliers, and other private citizens) and 400 sheep. Photo courtesy of Fjällbete.