

Unravelling Debt

The Economy, Banking and the Case of JAK

"Earth provides enough to satisfy every man's need, but not for every man's greed."

Gandhi¹

"The future is not some place we are going to, but one we are creating. The paths are not to be found, but made, and the activity of making them changes both the maker and the destination."

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Abstract

This dissertation is written from a deeply felt understanding that we are causing great harm to the planet and therefore endangering our future. This depth has come from my spending a year at Schumacher College. Here, by applying holistic thinking and with help from world-renowned experts, we have looked closely at the evidence for how our culture is living beyond the means the planet provides. Nothing can be more important for humanity than addressing this situation.

The multitudes of facets to our society have all evolved together but the emergence of western science and the mechanistic worldview has greatly influenced much of that evolution over the last 300 years. Within this time the 'science' of economics has come into being, developed, and shaped our culture to the point where the economy now dominates. Yet economic theory and hence our economic behaviour is limited and does not embody the full human nature. The incredibly successful pursuit of economic growth has brought us to the current ecological crises while shifting behaviour towards individualism and lack of community, and is failing in its purpose of "solving all economic problems and, in particular, reducing poverty" (nef report, 'Growth isn't working').

While we are getting wealthier, we are neglecting much of who we are, much of our species suffering in poverty and much of our world, all of which are essential to our well-being. Sustainable solutions are needed throughout our culture, which encapsulate a holistic understanding of human well-being.

In this report I look closely at one of these potential solutions. But first I explore more fully the prevailing characteristics of our economic behaviour. Then I study the arguments which say that the interest-bearing debt based money system we rely on to facilitate all our economic activity is a root cause of the problems of unsustainable growth and social injustice. The effects of our systems are not felt only within their own realm but throughout the co-evolving culture and within ourselves.

This critical analysis informs Part 2 of the report where I examine the JAK Members Bank in Sweden. JAK is a bank founded on the belief that interest charges on debt are harmful and unjust. It uses a unique method of providing saving and loan services without any interest charges or payments. It therefore demonstrates, with a viable business, the ability to avoid some of the problems discussed in Part 1.

To make the transition to a sustainable way of life requires changes to our systems, and changes to the behaviour of those using the systems. The JAK model can be part of a change towards a sustainable approach to money while also encouraging the necessary change in behaviour.

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The artwork on the cover of this report is titled:

Unravelling of the telescopic mind incident

Thank you to the artist, Thaneeya McArdle, for giving her permission for me to use it here. The theme of the drawing is the mythic concept of life, growth and evolution.

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METHODOLOGY

The question that started this project was, “What can I do to start a JAK Bank in Totnes?” and the project has followed my own path in trying to answer that question. From this start it was necessary to take a step back. I first had to make sure whether setting up a JAK would be a good idea. This is covered in Part 2 of this report. I also had to make sure I had the knowledge required to confidently discuss the nature of the economic, monetary and banking systems and so be able to justify the need for change. This is covered in Part 1.

I have structured the dissertation so that it takes the reader on a journey through nested wholes from the macro-scale economy, to money and banking down to the specific analysis of the JAK Bank. Referring to other levels in a ‘holarchy’ is crucial to fully understanding any specific whole.

Part 1 is drawn from a literature review. I searched for books and writings which would inform my knowledge about how we arrived at our current economic and monetary systems and what their characteristics are. One thing they had in common was stating the need for these systems to change. I have presented my learning which is relevant to the journey towards JAK.

Part 2 is drawn from a literature search for information about JAK, but mainly from many discussions and my subsequent analysis and reflections. One-to-one recorded discussions were held with the following people:

Magnus Frank, Bank Manager, JAK Members Bank.

Yvonne Gustafsson, Membership Manager, JAK Members Bank.

Johan Oppmark, Chief Executive, JAK Members Bank.

Hans Gefvert, former Banking Manager, JAK Members Bank.

These meetings took place on my visit to Sweden to learn about JAK Bank.

Charles Middleton, Managing Director, Triodos Bank UK.

Giles Andrews, Managing Director, Zopa Limited.

Bernard ‘Bone’ Wilson, Chair, Devonlane Credit Union.

I arranged to meet these three people as they are leaders of organisations highly relevant in my considerations about starting a JAK Bank.

Julie Richardson, Director of the Land Scope project, Dartington Hall Trust.

Mark Gater, Schumacher participant who first told me of an interest-free bank.

Julie is a Schumacher College MSc Alumni with a particular interest in strengthening local economies. She is also a Trustee of the Transition Network (see page 80). Mark has a strong interest in the money system and discussions with him have been very beneficial in clarifying my thinking.

The dissertation is targeted at a UK audience. However, I hope my analysis of the JAK banking model can be helpful to interested parties anywhere in the world.

CONTEXT

I am a student in Holistic Science. I care deeply for the future of humanity, Life and the planet we inhabit. We are all a part of those three wholes and so all have responsibility for them. I place great importance on fairness and honesty.

A very important lesson for me during the Masters course came early on with the study of hermeneutics – the interpretation and meaning of texts. I have written this dissertation from my own context. The words I have used were chosen to best convey my thoughts and feelings about the subject matter. You the reader have your own context. The meaning you derive from reading this dissertation will come from the relationship between the text and your context, not necessarily the meaning I intend.

This project would be different if written by someone else. I am an integral part of the information as it is presented herein. Therefore I have included some of my own personal voice by reflecting on what I have learnt and the actions I have taken throughout the project. These more personal parts are shown in **green text**.

Everything we believe in is a story of one form or another. Everything we hear or read can be believed, accepted or rejected. Millions of people can unquestioningly have a belief that millions of others reject out of hand. The wider context and story within which this dissertation is written is our western culture. We are all immersed within it and so the story is being constantly reinforced, making for greater inertia. This makes it very difficult for new stories to gain a foothold.

But our culture is really very new in terms of our history as a species and a part of life on the planet. Our nature as living beings is affected by the nurture of our culture. If we can recognise this, then we can attempt to see the assumptions we habitually make because of our conditioning, and to put those assumptions on hold.

On the first day of the Holistic Science course we discussed the Jungian Mandala containing Thinking/Feeling, Sensing/Intuition as the four equal aspects of the human psyche. It is our Thinking that dominates in the modern culture and our Thinking that is most easily conditioned by our culture. We need to use our feelings, senses and intuitions more to fully understand something from a wholly authentic human perspective.

So, in reading this dissertation, all I ask is that you read it openly. Put your assumptions on hold and use your intuition and feelings to inform you as to its meaning.



INTRODUCTION

How is it that our economy has grown so much over recent years, that as a country we have become far wealthier, and that we are able to consume thousands of products which we really don't need, and yet we are unable to afford adequate public transport infrastructure, or to pay teachers a salary appropriate to their obvious importance, or to keep post offices open in rural communities? Why are we so obsessed with growing the economy all the time and not concentrating on providing what society really needs? These are the kind of question that troubled me for years before coming to Schumacher College. Of course there is no single answer but I now know that the very financial system that the economy runs on makes these results somewhat inevitable.

My own story has been played out almost entirely within the western culture of the United Kingdom. I have lived in England all my life. I am a beneficiary of that culture of economic growth and pursuit of wealth. I live in safety and comfort with no fear of not having food on the table or shelter over my head. And I am grateful.

Yet through my adult life I have become increasingly concerned about the inequalities in our country and in our world. We sit in this country in safety, with food aplenty, while billions live in poverty. I started to see the uncaring environmental destruction we cause and our inability to act. With these situations going on around us our priority remains the same; increasing wealth for ourselves. Is this right? Isn't there a better way?

But even with these growing feelings, I continued to enjoy my life as one of the lucky few. I lambasted government for its ineptitude in dealing with these issues while in my own life I raced cars and developed property without any environmental consideration, motivated instead with going faster and keeping costs down. Except my life was missing something. I was not living in accordance with my own deeper values and concerns.

When I read Schumacher's 'Small is Beautiful' at the beginning of 2007 my mind woke up to this realisation. I understood that I am part of the problem, and I understood that my own well-being is dependent on the well-being of society and that my own life should reflect what I want for society. I came to Schumacher and learnt to see the world as networks of nested wholes, about the behaviour of these complex systems, and to put in perspective the present in relation to the history of life. When I came to Schumacher I wanted to know, "What can I do?" and found that bottom-up action is every bit as important as top-down intervention when it comes to systemic change.

I first heard mention of a bank in Sweden that did not charge interest from a fellow participant on the 'Can the Earth Survive Capitalism' short course and was immediately interested. I hadn't given the role of interest in the economy particular consideration

but the idea sparked something in me and I was keen to ask Richard Douthwaite¹ about it when he arrived for the third week of the course. Richard was enthusiastic about the benefits, and the way it was described further fired my own enthusiasm. Here, it seemed, was a fully operational bank that played no part in the wider financial system and its harmful impacts, and by design successfully eliminated the need to charge interest on loans, whilst at the same time providing financial benefits to its members. I immediately had the thought that this was what I could do. I could look into opening a similar bank in Totnes.

In making this decision, and following a flurry of excited research, I soon realised the extent of the project. The idea of JAK may have instinctively made sense to me but it was apparent that I actually had very little knowledge of mainstream economic theory, alternative economic theory, the financial system, or lending practices currently available in the marketplace. Therefore a large part of the work I have done so far has been this background research. Meanwhile I have learnt as much as possible about the JAK model and have thought about, researched and discussed how to go about forming a bank of this type in the UK.

The field of economics is wide, and much of the debate about economic reform concerns change to our currency systems and the need for complementary currencies. In this dissertation I have kept to areas of the topic that are relevant to, and inform the later discussion around JAK Bank. Within these complex subjects there is, of course, a great diversity in the behaviour of individuals and businesses. In this report I write about general characteristics and behaviours. By doing this I do not mean to dismiss the diversity but rather to give indications of the pressures on behaviour within society. I refer to 'we' and 'our' because the subjects concern us all.

My motivation came from a feeling that, while much has been written about sustainable economics and monetary reform, there is a great need to try things out. Trying something locally would fit in with my belief in the need for re-localisation. Being in Totnes provides a great place to try new ideas, as there is a relatively high acknowledgement of current problems, receptiveness to new thinking and new solutions and a flourishing network of forward thinking people. Writing, talking and educating about the nature of our economic system is very much needed as most people don't even consider many aspects which will be discussed below, the status quo is taken for granted. However, I feel that the most powerful way of facilitating change is to actually show people a different way, to practically demonstrate that the way things are is not inevitable and it is within our own power to do something better.

PART 1: THE ECONOMY, BANKING AND MONEY

“The hope that the pursuit of goodness and virtue can be postponed until we have attained universal prosperity and that by the single-minded pursuit of wealth, without bothering our heads about spiritual and moral questions, we could establish peace on earth, is an unrealistic, unscientific, and irrational hope.... now that we have become very successful, the problem of spiritual and moral truth moves into the central position” E.F. Schumacher¹

Chapter 1: Holistic Thinking and Deep Economics

Through studying the history of science it is apparent that our explanations of reality change over time. However at any one time we can become very attached to a particular way of seeing things. Thinking holistically is to recognise that reality is multi-faceted and so one way of seeing cannot accurately represent the whole picture. Therefore in receiving a theory we should welcome it as furthering our understanding but accept that it is one story about reality in a particular moment in time. Rather than attach ourselves to a specific view we can ‘hold ideas lightly’,¹ humble in the recognition that they are not an absolute representation of reality and our understanding will change over time.

Much of holistic thinking is concerned with the relating of parts to wholes. In the study of a phenomena, we understand that it is not isolated but related to other phenomena, contains parts of its own and is itself a part of a larger whole. An authentic understanding of the phenomena cannot be achieved without reference to these relationships. Using this approach, in contrast to the reductionist methods of mainstream western science, new scientific developments have provided an important contribution to our understanding of our place in this world.

Complexity theory helps us understand these relationships within complex systems, whether an organism or ecosystem, an organisation or even the economy. It informs us that system change is non-linear and that behavioural change in a small number of actors can have a disproportionate effect, leading to a transition in the behaviour of the whole system.

Gaia theory has helped us to see the Earth as a whole, living system within which all life and the environment is connected and contributes to maintaining the conditions of the whole.

Another key to holistic thinking is the attempt to understand a phenomena’s coming into being. This upstream thinking helps us to see the relations between things as well

as the differences that are more obvious in our daily experience 'downstream' of the phenomena's emergence.

Evolutionary theory has shown that all life has evolved from the same source, all species being expressions of the creativity of life. This gives an historical perspective to the relationships between all of life.

Deep Ecology is a philosophy that fits closely with these scientific insights. It promotes all decisions being taken from a solid eco-centric foundation that recognises, and places the utmost importance on, the value and relatedness of all life. The Deep Ecology philosophy is reached by an individual's deep experience and deep questioning so that it is achieved from within rather than imposed. Connecting deeply in this way with what it is to be human as a part of an interdependent world provides a foundation on which all beliefs, decisions and actions can be based.

Insights from Deep Ecology can seem general and vague but when applied to a specific area they guide one's thinking within authentically human bounds. The background generalisations underpin the more specific thinking so that all action is coherent with the principles of life.

By starting with Deep Ecology and the insights from modern holistic science we can put the economy in its rightful place. Etymology helps us in this task. The word 'Ecology' comes from the Greek '*Okologie*', from *oikos* meaning house or habitation and *logia* meaning, "study of".² On the largest scale for humans this equates to the study of Gaia. Economy comes from '*oikonomia*' meaning house or habitation management. As Deep Ecology would suggest, the effective and sustainable management of Gaia should be the primary objective of our global economy. If we accept that the well-being of our own self is dependent on the health of all the relationships between us and everything we are connected to, then we can see that far from Deep Ecology's eco-centric view requiring humans to sacrifice benefits to themselves for the profit of the rest of life, it will have beneficial effects upon the life quality of men and women themselves. This is an Ecosophy (wisdom of the household) which is about how to live wisely on this planet.³

Deep Economics is to see our actions and interactions from this perspective and not only to understand how things are, but to understand how they could and should be built from an authentically human foundation.

Shallow economic thinking deals with the symptoms of the status quo system. Deep economic thinking re-directs the system itself towards the ecological principles of 'diversity, complexity, autonomy, decentralisation, symbiosis, egalitarianism and classlessness'.⁴

1.1 Applied to Traditional Economics

“[Political economy should be looked upon] not as a thing by itself, but as a fragment of a greater whole; a branch of social philosophy, so interlinked with all the other branches that its conclusions, even in its own peculiar province, are only true conditionally, subject to interference and counteraction from causes not directly within its scope.” John Stuart Mill (1806–73)⁵

Economics has come to dominate our society, with the question, “Is it economic?” being the primary means of judging activity. The wisdom of using this narrow judgment is largely unquestioned but even as modern economic theory was becoming established people were aware of the potential pitfalls. In the founding of a professorship in political economy at Oxford in 1825, the Provost of Oriel College, Edward Copleston, did not want to admit a science “so prone to usurp the rest”, while Henry Drummond, who endowed the professorship, made it clear that he expected the study of political economy to be kept “in its proper place”.⁶

Modern economic theory, of which Adam Smith (1723–1790) was the most famous but far from the only proponent, was heavily influenced by the developing physical sciences characterised by a mechanistic worldview and the mathematisation of nature. Just as the new scientific methods proved successful in our attempts to understand and control nature for our benefit, so too the new economic theories allowed greater understanding and manipulation of the economy.⁷

However the emphasis on reduction to basic parts and use of simplified models meant that the understanding provided by the new scientific approaches was limited, and therefore if used exclusively, very misleading. Science and culture co-evolve, there is no isolation of one from the other, and the influence between them is two-way. This results in inertia of established worldviews. Over time they and the methods supporting them become embedded and unquestioned by society at large. As they come to dominate decision making over other considerations, their limitations and their negative effects become ever greater.

The difference with economics against other sciences is that its theory can be quickly applied at a high level affecting the whole of society. This makes the co-evolution much quicker and the negative effects more keenly felt. Economics now increasingly dominates science itself.

The intentions were good in the desire to apply mathematical models in economics but the desire led to assumptions being made to fit predictable models rather than developing models which accurately depicted reality. This meant that throughout the 19th and 20th centuries, economic predictions and policies were made based on the outcomes of models with built-in flawed assumptions. These models assumed uniform and perfect behaviour of individuals, externalised many influences and so took no account of the vast web of complex relationships the economy is made up of.

Here I discuss some of the basic assumptions and qualities contained within traditional economic theory that have become ingrained in our culture.

Pursuit of Self-interest

“The so called struggle of life, and survival of the fittest, should be interpreted in the sense of ability to coexist and cooperate in complex relationships, rather than ability to kill, exploit, and suppress. “Live and let live” is a more powerful ecological principle than “Either you or I.”” Arne Naess⁸

Smith, in his book *‘An Inquiry into the Nature and Causes of the Wealth of Nations’* (1776), proposed an economic theory on how to create increased wealth and how to allocate that wealth. He proposed that wealth is created by taking raw materials out of the environment and, through the input of labour, changing them into items with utility. The key to wealth creation was to increase the productivity of labour. This implicitly recognises that there is a limit to labour supply, but does not recognise any limit to the environment’s resources.

In creating wealth, Smith’s theory has proved extremely successful and therefore has been pursued. However, two hundred and thirty years later, the lack of environmental consideration has left us within a self-created ecological crisis. This is not Smith’s fault, of course, but provides an example of how things develop over time, and a lesson that we must take a long-term view and allow for flexibility to adapt to changing circumstances and external perturbations.

In allocating the created wealth Smith, previously a moral philosopher, was looking for the most just allocation. He argued that the important goal was maximising the wealth of society as a whole, and that the best way to do this was through trade in competitive markets. In this, Smith theorised about an emergent property of the system – that through the intentional pursuit of economic self-interest by individuals, the unintentional result would be the benefit of society as a whole from the increase in provision of goods and services. This is central to the modern world – that growth in total wealth will benefit everyone by a trickle down of the benefits through the system and that as individual actors we will all maximise our financial gain.

Pursuit of self-interest (as the means to achieve economic growth) is an unquestioned bedrock of economic theory. Many who see the problems of the economy are resigned to their inevitability due to the unquestioned assumptions of human individualism and greed. But this is not our complete human nature.

Cooperation was key to the success of our ancestors living in small tribes. The cornerstone of this essential cooperative behaviour is the instinct we possess for reciprocity. Modern behavioural psychology has now found, supported by widely

acquired experimental evidence, that humans have strongly ingrained rules about fairness and reciprocity. We will act generously as long as others are doing so but will act selfishly toward, and punish, those who behave unfairly.⁹ This behaviour is simplistically summed up in the strategy of 'tit-for-tat'. By understanding this behaviour we can see that selfishness breeds selfishness. The pursuit of economic self-interest, justified through its assumption in economic theory, has led to the breakdown of community that we see today, community that is vital to our overall well-being and sense of belonging, and which cannot be bought with money.

By recognising our connection to all life we can start to understand how we depend on the relationships we have and how our own well-being relies on the well-being of everything around us. Deep Ecology redefines self-interest. We can recognise that we do want what is best for ourselves and our families but the self spreads far wider than our physical bodies and is influenced by all our interactions. To pursue true self-interest is to pursue what is best for the whole. In society we are all better off if we help each other out.

We need theoretical and practical economic system changes which will encourage and reward cooperative and altruistic behaviour, which will spread through reciprocity and move towards achieving the true economic purpose of well-being for all.

That we are not completely selfish individuals is obvious if looking at our behaviours outside of work. We are social animals and cooperate with others many times every day. It is in the work and business environment that self-interest and greed are most vociferously pursued and justified. Even in other cultures, where spirituality still plays a central role in guiding behaviour, greed is still pursued during business hours as the accepted behaviour of wealth creation and personal betterment.

I completely understand the motivational drive behind the quest for personal riches. It is not commonly seen as greed but as honest effort to improve the life of the individual and the family. For me growing up within this culture I felt exactly the same way, confident that I would go out into the world and become wealthy from success in business. I have taken many selfish decisions in a business environment not because that is my character but because in that environment I was taking decisions that would be judged successful. The influences that changed my outlook are many but perhaps importantly it coincided with gaining some financial security myself, making it easier to change perspective.

New areas of modern science are now concurring with ancient wisdom in many areas.¹⁰ Unfortunately, for science to reach this point has taken hundreds of years and over that period it, and so our culture, has become disconnected from this wisdom. This reinforces the case for arguing that this wisdom is within us. We don't need to wait for science to tell us everything about how to be as a living species. With a holistic approach of using out thinking, feelings, senses and intuition we can reconnect ourselves to this deep understanding.

Quantity over Quality

"Not everything that can be counted counts, and not everything that counts can be counted." Albert Einstein (attributed)

Mathematical models require the use of quantities and measurement of particular information. The intention of the model may well be to improve a real quality of life but as the model becomes trusted then it is the quantities which feed it that become primary. But the quantities only provide very partial information. Even if we could accurately measure every aspect of life, it would not be possible to look at all the sets of data and gain a true appreciation of the real qualities of the life being measured. We can count the quantities but it is the qualities that really count.

The focus on quantities takes us away from a holistic view towards multiple specialist views. It is natural for us to see some quantities as more important than others from our own context. Organisations will argue endlessly with each other that their data is right and the other's wrong, not realising that both are right, but only partially.

As we focus on the quantities we believe are most important, it affects our decision making, as improvement in the quantity becomes the objective in itself. But none of these quantities is isolated. Each measurable aspect is interlinked with many others. The focus on a quantity distorts our understanding of this inter-related reality.

The primary measure of how well the nation, and therefore society, is doing has become that of economic growth rate, and it has become the most important objective of government. How big the economy is, or how many resources are being used up, are not important relative to the principal concern that the economy keeps on growing. If the economy is doing well, discussion spreads to wider societal issues but the government will often fall back on the strong economy they are 'managing'. But if growth slows, the economy soon becomes the dominant story. We are implicitly given the message that growth is the most important thing for the welfare of our society, and because of that the government is simultaneously under pressure to make it easier for growth to take place.

But in our obsession with economic growth we ignore its nature, how it is being achieved and what the wider consequences are.

The Nature of Perpetual Growth

The nature of this economic growth is not linear but perpetually accelerating. Growth is talked about and compared in percentage terms. A 3% growth this year is comparable with a 3% growth last year. As the size of the economy increases the amounts of growth that have to take place to achieve the same percentage is bigger,

i.e. the required growth in the size of the economy is exponential. To maintain a comparable level of growth, the economy has to continually accelerate without limit.

There is a strong instinct that exponential growth cannot be possible indefinitely. It feels inevitable that it cannot go on forever and a limit must eventually be reached. I still come up against people asking "Why not?" so obviously that instinct is not shared by all.

In discussing the problem of continual growth, an argument I often hear back is that, "You can't stop progress". I don't want to stop progress. But I think we can choose to progress in a far more sensible direction that is ultimately better for everyone.

Governments tell us that we need growth to solve the world's economic problems, particularly for reducing poverty. This thinking echoes Smith's assertion that maximum benefit for maximum people is to be achieved through growth and that the benefits will trickle down. There can be no doubt that the massive increase in global wealth has dramatically improved the lives of millions of people. However, the New Economics Foundation 2006 report, 'Growth Isn't Working' states, "for every \$100 worth of growth in the world's income per person, just \$0.60 contributed to reducing poverty below the \$1-a-day line."¹¹ Growth is becoming increasingly ineffective at reducing poverty as the evolution of the economy allows widening inequality in the distribution of wealth so that the world's rich hoard a greater percentage of global financial resources. Economic growth is not working for its stated purpose. Unfortunately the actual purpose has become growth itself. Over time, through the development of traditional economic theory and the patterns and processes that have emerged in the economy itself, growth has been built into the system. The economy developed based on the assumed need for growth so that without it the system is in danger of collapse.

The environmental crisis is tangible evidence that our narrow economic objective of perpetually accelerating growth is not beneficial to the human species. Economic purpose must be redefined away from financial growth towards the growth in well-being for all of the Gaian system.

Scarcity and Competition for Resources

Another core assumption of traditional economics is the scarcity of resources, that not everyone can get access to enough goods at all times. This assumption persists despite several periods in our history when there was "poverty amidst plenty"; times when there has been an abundance of supply but people have been unable to afford what they need.¹² What it is important to note here is the widespread belief in scarcity and the behaviour that the belief stimulates - competition.

Make no mistake, I am a competitive person and I believe that, for me, it is a positive attribute. I love to test myself against others to see how well I can do. But in this I

don't feel I am competing **against** other people. There is no desire to see others fail or even to stop them succeeding. I am as happy for others' successes as I am for mine. And I am non-judgemental of those who are less 'successful' in one field, and recognising that 'success' comes in many guises. The competition is with myself. My competitive instinct is about my own esteem and about trying to make myself better. I think that competition can be a powerful force in making society better, but it does not have to happen at anyone's expense. It can happen *within* a cooperative society.

The concept of scarcity originates from the theory that humans have unlimited wants and needs and so there is no way in which they can all be satisfied in a finite world. It is ironic that the finite world is recognised in this theory but not in the desire for never-ending growth. This highlights another problem with traditional theory; that there is no distinction between a basic need for survival and a luxury product, there is only supply and demand.

Maslow¹³, in his 'Hierarchy of Needs', and others (Manfred Max-Neef¹⁴) have differentiated between an individual's various needs, and wants. Maslow's Hierarchy starts with basic survival needs such as food, water, air and shelter, through social needs of belonging and esteem by others to the higher needs of self-actualisation. (I relate Maslow's self-actualisation with Naess' self-realisation as the deep need to be true to ourselves as human beings). In our demand for goods we will prioritise spending to satisfy the basic survival needs, but after these are met we will purchase what we 'want' in order to meet our societal needs and so this consumption is driven by many cultural influences. Our culture currently encourages maximum consumption of things that we do not need.

I would suggest that a climate and environment that is stable and supports our lives would have to be the most fundamental need of society and therefore government policy should have this as the priority.

The Hierarchy of Needs also infers that it needs to be the well-off and secure sector of society (in which I am included) that leads the change towards sustainability, equality and holistic well-being. People without food and shelter security cannot be expected to focus on anything else.

Scarcity of resources is a fallacy. Our productive capacity is huge and we produce an enormous quantity of things that we simply do not need. At the same time we are continually wasting resources. We have the capability to meet everyone's needs sufficiently.

1.2 The Economy as an Evolving Complex Adaptive System

According to Eric D. Beinhocker, the global economy is by far the biggest complex adaptive system ever created by humankind¹⁵. It has come to dominate human society

both at an individual and global level and our interactions are seen primarily in terms of their economic effect. The economy is made up of billions of nested wholes; nations, governments, industries, corporations, NGOs, and individuals creating immensely complex patterns of relationships over which no person or organisation has overall control. The economy is to a large extent self-organising and it was not designed. It has evolved. The multitude of influences are constantly changing the economy and the timescales for its evolution are fractions of those involved in biological evolution. As a complex adaptive system we must understand that economic evolution exhibits hysteresis: it is path dependent. We cannot go back, and we shall see in Chapter 2 that this has strong implications given our system of money supply.

As a complex system the economy is chaotic and unpredictable. Chaos theory shows us that small changes occurring in one place can ripple and magnify around the world with real people feeling the effects along the way. Short-term economic forecasts can be made and these can appear accurate but they are very simple and broad and become far less reliable over longer periods. In these ways we can see similarities to weather forecasts. Attempts to control the weather with macro-scale changes over long terms from simplistic forecasts would be disastrous. Yet that is what we do with the economy. Macro-level changes are made in attempts to control the economy, in order to keep it moving in the same direction. The effects of these changes have dramatic impacts on the real individuals and communities at the smaller scale of the system.

It has been said that the Gaian system is a result of all her feedbacks¹⁶, and I suggest that possibly the economy we have is a result of all its feedbacks. Unfortunately, as we have seen, positive feedbacks (exponential growth) are actively pursued in economic policy, seen as a good thing bringing wealth, without any acceptance or understanding of the dangerous and unsustainable nature of these runaway feedbacks. As understanding of the characteristics of complex systems increases, and is related to the economy, perhaps we can learn to manage the economy more gracefully, incorporating controlling negative feedbacks to keep activity within ecological limits.

One of the realisations of viewing the economy in this way is that its complexity and number of connections grow exponentially in relation to growth in wealth. This has implications for the system's stability and resilience to perturbation. Changes in a system come from the action of feedbacks but depend on the connections and relationships between the different 'nodes'. A new report has applied learning about the structure of complex systems (such as ecosystems, fisheries or climate) to analyse systemic risk in the financial sector. The report looks for the characteristics of the structures which "correlate with a high degree of robustness".¹⁷ The study found that "within the financial system, robustness is something that emerges; it cannot be engineered." The system is also very susceptible to influence from its interaction with other human networks in ways different to networks in ecology, the report stating, "The odds on a 100-year storm do not change because people think that such a storm

has become more likely". Public perceptions and asset valuations are essential aspects of financial risk.

Modularity – the degree to which nodes in a system can be decoupled into relatively discrete components is also a common sign of system stability. "If there is strong interconnection among all elements, a perturbation will encounter nothing to stop it from spreading".¹⁸

The economy we need as part of a just and sustainable society will not be achieved only through macro rule changes. Part of the answer is through micro-management relating to local contexts. Through the re-localisation movement, communities of varying scales need to take some control of their own economies so they are not at the mercy of global capital.

Complexity economics is not the first time evolutionary principles have been used in relation to economic theory. Social Darwinians used biological 'survival of the fittest' to justify individualistic economic behaviour and survival of the wealthiest. But the new views of economic evolution have nothing in common with these old views. They point to the opposite, identifying cooperation as a vital ingredient of economic development providing another contradiction to the harmful pursuit of self-interest.¹⁹

Beinhocker carries complexity economics and the evolutionary process through to formulate a new understanding of the creation of wealth. Biological evolution explores the creative field and those expressions, which are 'fit' for living within their environment, survive (are 'selected') and reproduce to contribute to future evolution. Beinhocker sees economic evolution (wealth creation) as the selection of "*Business Plan modules that contribute to fit economic order*", going on to say that, "*just as species and their environments co-evolve, the competitive ecosystem of Business Plans and the preferences of consumers co-evolve*". The replicator driving this process is 'Knowledge'. As it evolves, we use knowledge to explore the creative field of wealth creation.

"The implementation of ecologically responsible policies requires in this century an exponential growth of technical skill and invention—but in new directions"

Arne Naess²⁰

In order to follow the new directions Naess speaks of, we need to embrace a more holistic understanding of what wealth is. Then knowledge, and therefore the evolutionary process, will be directed to exploring and creating 'fit' economic activity creating wealth coherent with ecological limits and principles.

1.3 Deep Economic Conclusion

“The wealth of a man is the number of things which he loves and blesses, which he is loved and blessed by.” T. Carlyle²¹

In economics, wealth is defined in terms of monetary value and utility but this is to ignore so much of what contributes to our well-being. People value family, friends and general well-being above material wealth, so why should we have an economic system that makes capital the primary consideration.

The economy should be a collaborative effort to provide what we **need**. Beyond that it can provide wants, but only by living humbly within the environmental limits we are bound by.

Principles about how we want society to be must be embedded in the economic system.²² With a morally neutral economy we are open to habits being developed which lead away from the society we would want. The way we think is the way we behave, and the way we behave is the way we think.

Game theory suggests the economy would be very well off in terms of “Gross National Happiness” if there were no highly competitive behaviour and only cooperative sharing.²³ However it is important that we accept the naturally occurring presence of competitive behaviour in human society. Aiming for a cooperative utopia is unrealistic and we would do better to acknowledge our complete behaviour set. However, without trying to eliminate competition, we can encourage beneficial cooperative behaviour through incentives, system changes and new business models. Take for example the investment of private funds. Rather than investments being made purely with the aim of maximising financial return, ways should be created for ensuring that these funds are directed to the common good (See Chapter 5.4 for examples).

Other human behaviours also have an impact. We quickly become accustomed to our circumstances and are resistant to change. Nic Marks, of the New Economics Foundation, has studied human well-being and found that people are highly unwilling to give up what they already have.²⁴ On average, people felt all they needed was an additional 20% to their income and then they would be fine and happy. However given that extra 20%, the money is quickly absorbed into the lifestyle and is taken for granted, leaving the person without any sense of improved well-being and once again feeling that they could do with another 20%. Despite the evidence that the extra money has not affected the persons overall well-being, they will fiercely protect it and be very unwilling to do without it, even though studies have also shown that people also quickly adapt to coping with adversity and loss.²⁵

“Many speak the truth when they say they despise riches and preferment – but they mean the riches and preferment possessed by others.” C. Colton²⁶

I can foresee the development of an economy that is based on cooperation rather than competition and how it would be far more successful in efficiently providing for the needs of the people while living sustainably within ecological limits. The problem is that to live within these limits I believe we must give up many of the trappings of the current system that are unsustainable. This will create inevitable economic contraction as consumption of un-needed goods and activities is dramatically reduced. This will lead to enormous changes in the employment market. There have to be mechanisms in place that enable the transfer of jobs to sustainable activities.

For many people to accept these changes requires a shift in what they believe to be important. The economic system is dominating our culture and that system is breeding selfishness, yet much human behaviour expresses wider values that allow us to live together in society. We need to reintegrate the economy with these wider values by opening up avenues in the system where people can act true to their nature as human beings.

Chapter 2: The ‘Debt Money’ Economy

As described above, growth in the economy and the wealth created by it, comes from the evolution of our knowledge. This knowledge is used to explore ways of new ‘fit’ activities, producing goods and services which provide for our perceived ‘unlimited needs and wants’. However in order to have access to the supply of these goods and services we need a way of trading. Money, one of humankind’s most useful inventions, is the social technology used to facilitate this trade. With money being the grease that allows the whole economy to keep turning, it is worth understanding what it is, where it comes from, and what effect these things have as the money circulates. As it turns out, the money system has a great, but largely unknown, effect on society. Without addressing these fundamental issues, we are to a large degree bound by the money system we already have, engaged in a constant battle to stem the tide of its negative symptoms and unable to deal with their causes. Money is largely considered to be neutral but we will see that it is anything but.

I have read several, well-researched and informative books on the subject of money, how it is created, what the damaging systemic effects are and some proposed solutions. There are some differing opinions between them and with each I have been left with unanswered questions making clear the difficulty in grasping the whole nature of the monetary system. In this chapter I give my synthesis of the broadly agreed upon information regarding money creation and interest.

2.1 A Brief History of Money and Banking

“The Bank hath benefit on the interest on all monies which it creates out of nothing.”

The Charter of The Bank of England, 1698 ¹

Currencies have developed spontaneously many times throughout human history, in multiple cultures, out of necessity to facilitate trade. Usually this ‘medium of exchange’ would not physically be an abstract, intrinsically valueless thing as money is today. Often it would emerge as a commodity in heavy demand meaning that many people would accept it in trade for their goods because they either wanted it themselves or knew they would easily be able to trade it with others.

As well as heavy demand there are other natural characteristics for a currency. It helps if they are highly divisible so that the value of many goods can easily be matched in the currency. It is also good for it to have a high value per unit of weight so that reasonable values can be transported easily. This implies a scarce commodity. These sensible characteristics make clear why gold and silver have so often become the main currency in places all around the world, as they did in the UK in the Middle Ages.²

With a scarce physical commodity acting directly as the currency, then the amount in circulation (the money supply) is strictly limited by what can be gathered, taken out of the ground in the case of gold. However, even with this type of currency, ways emerged of expanding the money supply beyond this direct relationship. The first is known as 'seigniorage', which is traditionally the difference between the cost of minting a coin and its face value. By reducing the percentage of gold in the coins (debasement) the money supply could be expanded. This often occurred with a change of monarch. The old coins would be recalled to have them re-stamped with the face of the new sovereign. In the process the gold content of each coin could be reduced meaning that more coins were produced from the same supply of gold, the extra quantity providing funds to the monarchy.

The other way the money supply was increased was through the origin of modern banking.

A Simplified Story about the Origin of Banking³

With gold as the currency, the safest place for someone to keep their money was in the goldsmith's vault with a fee being charged by the goldsmith for this service (contrary to the present situation with deposits earning interest). The Goldsmiths would issue a receipt for the deposited gold. These receipts started to become acceptable as payment for goods, as it would pass on the entitlement to the gold and the goldsmiths had trustworthy reputations. This was the start of paper money in the modern system. It is important to realise that, with this development, right from the start of an abstract 'note' being used as the means of exchange, money became a debt. The goldsmith's receipt was a promise to pay on presentation of the receipt, which has continued on banknotes to this day.

The goldsmiths realised that a large proportion of the gold coins they were storing never left the vault. It was therefore possible to issue additional receipts as loans so that total receipts were for more gold than was actually in the vault. Remember, all the receipts carried a charge over time and so this fraudulent activity boosted the goldsmiths' income considerably. This was a risky business and an increased demand for redemption of the receipts would quickly expose a goldsmith undertaking this activity, at which point the depositors would be rightly upset. Rather than halt this lucrative activity, the goldsmith offered to share the benefits with the depositors. Rather than charge for storing the gold, they would pay the depositors interest.

This is the basis for the modern banking system and is widely accepted as a reasonable situation. Banks accept deposits and pay interest on them while lending the money, at a higher interest rate, to others.

However, the commonly held view that banks lend out deposits is misguided. They do not lend out the deposits for these are still available for the depositor. In issuing the interest-bearing loans, what they are doing is creating money out of nothing.⁴ The vast majority (97.2%) of money in circulation has not come from the Royal Mint but from the banks and other lenders creating it as debt.

The fraudulent activities of the British 17th century goldsmiths was legitimised as, by allowing loans to be issued in this way, economic activity was greatly stimulated. This practice became known as 'fractional reserve' banking and was deemed not fraudulent with the decision taken in law that money deposited in a bank effectively becomes the property of the bank (and appears on the balance sheet) to do with as they please. This is despite the agreement to pay the depositor on request.

For every deposit that a bank receives, it is entitled to create new money by making a new loan typically up to 90% of the deposit's value, keeping only a fraction, 10%, on reserve. Looking at a bank's operations in this way opens the eyes to their inherent unsoundness. Banks that practice fractional reserve banking are inherently bankrupt, unable to meet the liabilities to its depositors; a 'run on the bank' being the result of an increase in demand for cash withdrawals that, beyond a certain level, the bank cannot possibly meet. The banking system has a long history of fragility for this reason, which seems strange given that so much trust is placed in them.

At the centre of the modern banking system are central banks. In the UK this is The Bank of England which has the aims of matching the money supply to the needs of the economy and providing monetary and financial stability.⁵ The government has given great privilege to the central bank by making its notes legal tender for all monetary transactions. Through its position of high trust and prestige, the bank acts as the lender of last resort to the other banks, protecting them against bank runs. Through its centralisation of reserves and the monopoly on note issue, the central bank can ensure that all banks in the country can inflate the money supply uniformly together. The only direct limit to money creation under central banking is the reserve requirement it places on the banks.⁶ Changes to the central bank's interest rate are used as an indirect influence by making borrowing more or less attractive.

Looking more closely at fractional reserve banking we can see the dramatic effect it can, and does, have on the money supply. Starting with a £100 deposit made to a bank, we know that a loan of £90 can be made. This £90 loan, created as a deposit in the borrowers account, will be withdrawn and spent. The recipients of the £90 will then deposit it in their bank, which, with the same fractional reserve requirement, can make a new loan of £81. This process can go through the banking system until the initial £100 deposit has led to the creation of up to £900 in new debt money. The following table shows the effect this has had on the whole money supply:

Table 1: Details of UK Money Supply 1977–2007

Year	Notes and coins in circulation £Billion	Total Money Stock £Billion	% of money supply not issued as debt	Total mortgage debt £Billion
1977	£7.8	£74.6	10.5	£33.2
1987	£15.1	£304.9	5.0	£183.5
1997	£25.4	£722.1	3.5	£431.3
2007	£47.4	£1,676.5	2.8	£1,186.6

Sources: EconStats and Bank of England, Monetary & Financial Statistics (Bankstats)

Over the last 30 years the total money supply has increased from just under £75 billion to nearly £1.7 trillion. This equates to an average annual increase in the money supply of 10.9% ($(1676.5 / 74.6)^{(1/30)} = 1.109$ which equates to 10.9%). Taking into account inflation over the last 30 years, this amounts to an annual growth of money supply in real terms of 5.6%. The proportion of debt-free money (physical notes and coins) in circulation has dropped to just 2.8% of total supply. The more that the public is willing to keep deposits on account and use digital transactions rather than cash then the greater the potential for fractional reserve banking practice. 97.2% of the money supply has been created out of nothing by the banks. All of this debt must be repaid with interest.

A Conventional Introduction to Banking

Within the first few pages of the undergraduate textbook, ‘Introduction to Banking’⁷ are the following statements:

- “a financial claim carries an obligation on the issuer to pay interest”
- “banks allocate funds to their most productive opportunities.”
- “a characteristic of financial intermediation is that new financial assets and liabilities are created”

These points are not discussed or explained. But in these three statements is the crux of the banking system that causes effects discussed below; interest is unquestioned, funds are used for maximum production and profit regardless of wider effects to society, and money is created out of nothing.

It was interesting to find these statements so quickly acknowledged in a conventional, pro-banking book after I had been reading so much about their negative effects in several highly critical books. It brings home the effect of context on viewpoint. If you want to be a banker then you are told these things, you accept them as normal and then get on with learning how to do it.

According to the conventional view, these are the benefits that banks provide as a financial intermediary, as compared to direct lending and borrowing between individuals:

- To the depositor: the bank provides liquidity, reduced risk, payment services, lower costs, and ease of process in comparison to people lending the money directly themselves.
- To the borrower: loans are available for longer terms, for larger amounts, with lower costs, at lower interest rates, and loans are available when required.
- To society: funds are utilised more efficiently within an economy, higher levels of lending and borrowing can be undertaken, and there is increased availability of borrowing to high risk ventures important to economic development.

There is no doubt that banks provide an essential function in modern society. I hope that in this report the reader can see the need to find a better and more sustainable way to provide this function.

From the early days of debasement through the modern era of bank-created money, the money supply has been expanding beyond any relation to the real physical world. The money system that became established around the time of the industrial revolution and the desire for economic growth has meant that the money supply has kept on expanding exponentially and become ever more abstract from the physical world. Until the twentieth century, gold was still used to back currency giving money some semblance of real worth although the amount of gold held in reserve was only worth a fraction of the money in circulation. Since the US left the gold standard in 1971, all our money has had no physical backing and its creation, as Table 1 shows, has continued apace.⁸

Now, with developments in technology easing money flows, the power to control currency is leaving national governments and central banks. It is being placed increasingly in the hands of the global foreign exchange markets. Through these markets, billions can flow into and out of an economy in seconds making government answerable to market expectations in order to maintain a stable currency.

2.2 The Role of Interest

“Usury is a thing allowed by the reason of the hardness of men’s hearts. For since there must be borrowing and lending, and men are so hard of heart as they will not lend freely, usury must be permitted.....it makes fewer merchants...makes poorer merchants. It bringeth the treasure of a realm or state into few hands.”

Francis Bacon (1610)⁹

To me this quote is representative of a problem that has arisen at times in our history; the willingness to allow, or encourage, a course of action for one purpose in the knowledge of the inherent problems of pursuing that action. In the Depression of 1930, the highly influential economist, Lord Keynes, said, “For at least another hundred years we must pretend to ourselves and to every one that fair is foul and foul is fair; for foul is useful and fair is not”.¹⁰ These approaches are highly dangerous, for once we start along a path we are unable to predict or control the long term effects, or be sure that we can put a stop to them.

From being outlawed by all the main religions and almost universally condemned, interest has become almost universally accepted in our culture. Usury, still forbidden, has been redefined as the charging of *excessive* interest rather than any interest at all. The start of this acceptance of interest began in the Reformation with the realisation that interest was necessary; otherwise people would not lend money. This argument has now progressed to interest being necessary to encourage investment into the most productive and profitable projects, thereby achieving the maximum economic growth and therefore increase in wealth. If maximum economic growth is what you want then interest certainly helps to ensure that everyone follows that objective. But the effect it has on our decision-making is far from helpful in the long term.

Interest encourages short-term decisions and favours projects providing high, short term returns rather than long term value. Put simply, it is only worth investing in projects that provide a greater return than the prevailing interest rate. This does not only affect how we think about investing money but also how we treat the use of natural resources such as land. The presence of interest makes us look at the future value of money in relation to expected growth through interest. Discounted cash flow analysis is used to select the most profitable business options. Just as, given an interest rate of 5%, if we invest £100 today we expect £105 in a year’s time, so if we are told we can have £105 in a year’s time we only see it as having the value of £100 in today’s terms. This discounting to present value shows exponential decay of future earnings from natural resources so that their profitability, and therefore use to us, tends towards zero. This results in ‘rational economic man’ extracting maximum returns from land and other resources over the short term. With the value quickly reducing then it is worth destroying land in order to get the quick returns. The following example is taken from Tarek El Diwany, 2003:

Table 2: Discounted Cash Flow

A plot of land managed using highly intensive techniques can provide a profit of £150 a year for 15 years but at the end of this time the land has been stripped of nutrients and can no longer support agriculture. An alternative technique produces £100 profit a year but can maintain this productive potential indefinitely. Given a 10% discount rate:

Year	Highly intensive technique		Alternative technique	
	Profit/ year	Profit Present value	Profit/year	Profit present value
1	150	136.36	100	90.90
2	150	123.96	100	82.64
3	150	112.69	100	75.13
4	150	102.45	100	68.30
5	150	93.13	100	62.09
6	150	84.66	100	56.45
7	150	76.96	100	51.31
8	150	69.96	100	46.65
9	150	63.61	100	42.40
10	150	57.82	100	38.55
11	150	52.56	100	35.04
12	150	47.79	100	31.86
13	150	43.44	100	28.96
14	150	39.49	100	26.33
15	150	35.91	100	23.94
16	0	0	100	21.76
For years to infinity	0	0	100	Decreasing towards zero
Totals	2250	£1140.79	Infinite	£1000

The table shows that, even considering an infinite timescale, the highly intensive technique, which leads to totally unproductive land after 15 years, is more profitable than the alternative technique that is productive indefinitely. Of course these valuation methods vary highly with changes to the discount rate; short-termism is increasingly encouraged the higher the rate of interest. But regardless of the rate, interest encourages large scale, resource hungry, high yielding projects. Interest rates provide an incentive to use up natural resources now. Long term, low yielding projects find it very difficult to obtain funding regardless of the benefits they may provide to society and the environment. This sort of discounting method takes no account of the finitude of natural resources, but even if they were infinite, it would be a highly unethical method with respect to sound ecological principals.

Another justification of interest is that it compensates those who provide money for use now in return for money at a later date. The reasoning behind this is that having money now allows its holder to satisfy needs now which must be better than satisfying them later, so money now must surely be better than money later – there is a universal time preference. However this does not take into account any variance in people’s situations. People would save for their future even if interest rates were zero. They would not consume all their money now just because they got no financial return for keeping some.

The utilitarian argument for interest is similar. Linked to the assumption of rising wages and declining marginal utility (that the next unit of consumption is of less use-value than the previous one), it says that interest is a means of equating present and future utilities obtained from the same amount of present money. Like many economic theories this relies on sweeping assumptions to make it workable. Inflation theory says that when wages go up, prices will also go up to absorb the increase. This would mean that consumption would not go up and so contradicts the utilitarian theory of interest. *I hope the reader is sharing my view of how difficult it is to accurately model the complex behaviour of economic activity.*

Part of the interest rate is seen as compensation for the risk of lending, that the money may not be returned. This leads to higher interest rates being charged to riskier projects or to borrowers with poor credit ratings. These risks are real in many cases, although the lender usually has the first claim on any returns despite taking on less risk than the borrower. There are many who argue that, if lending to high-risk projects and expecting some return, the lender should take on some of the risk directly through an equity share. For personal borrowing, security is often required, greatly reducing the risk to the lender, so interest as compensation for risk is not as justifiable as it might seem.

The justifications for interest presuppose the greater importance of the present over the future. I believe we are now at a time when awareness is growing of the need for long-term sustainable solutions and our obligation to future generations. However, we have a deeply held bias towards short-termism continually reinforced through our interest-bearing money system.

Bernard Lietaer¹¹, in *The Future of Money*, identifies three main effects of interest. Firstly that it “indirectly encourages systematic competition among the participants in the system”. This is because of what Ellen Hodgson Brown refers to as “the impossible contract”:¹² the need for all created debt money to be paid back with interest that hasn’t been created. In a non-growing system everybody has to compete to find the interest *at the expense of others*.

The drastic consequences of this scarcity of money and the aggressive competition it creates can be alleviated by further growth in economic output and the money supply. This need for endless growth to avoid the dire consequences of “the impossible contract” is Lietaer’s second effect of interest. The first portion of growth allows interest to be paid. Within the current system, money itself is seen as more important than the people. Priority is given to ‘the wages of money’ (interest payments) over the wages of people.¹³

The third effect is the concentration of wealth from the vast majority to the very wealthiest minority.¹⁴ The wealthiest own the majority of interest-bearing assets and do not need to borrow. The outcome of this transfer is an extension of the imbalances in wealth between the rich and poor. The interest-bearing money system is

systemically biased in favour of the rich, something that modern welfare and taxation systems are in a constant battle to overcome.

There is no real separation between the classes, we are all here together and the well-being of each of us relies on the well-being of all. To keep in touch with my own philosophy I include the following quote.

“The deep ecology movement assumes an anti-class posture. The modern day diversity of human ways of life is in part due to (intended or unintended) exploitation and suppression on the part of certain groups. The exploiter lives differently from the exploited, but both are adversely affected in their potentialities for self-realization.”

Arne Naess¹⁵

To let Lietaer summarize the impact that interest has had on our society,¹⁶

“The three side effects of interest – competition, the need for perpetual growth and wealth concentration – are the hidden engines that have propelled us into and through the Industrial Revolution. Both the best and the worst of what the Modern Age has achieved can, therefore, be indirectly attributed to these hidden effects of interest – the apparently banal feature of our officially prevailing money system.”¹⁷

2.3 The Effects of the Interest-Bearing Debt-Money System

Chapter 1 covered the need for perpetual accelerating growth as the main economic objective. We can now see that we have created a money system in which this need for growth is an intrinsic requirement. Growth was a legitimate aim centuries ago but in the modern world we now have strong reason to question whether we have grown too much. The efforts to continue growing are resulting in accelerating resource use and in increasing abstraction from the real world and people of the financial system. What we need to remember is that this growth depends on people taking out more and more debt. There is a perpetual push for more borrowing to take place. This debt has its own effects on our society.

Business debt repayments have to be passed on to the consumer in increased prices while consumer debt reduces disposable income. Total personal debt increased from 14% of Gross Domestic Product (GDP) in 1963 to 70% of GDP by 1996. Household debt as a percentage of household income rose from less than 30% in 1963 to over 100% in 1997.¹⁸ This is total household debt, not annual repayments, but it demonstrates the increasing debt burden the public is taking on.

We are living in the paradoxical situation of becoming ever wealthier and consuming more goods, while at the same time becoming ever more indebted with increasing pressure to meet debt and interest repayments. This leads to pressure to work harder and longer. Despite our enormous consumption we feel that we do not have enough

money. We are under stress to work harder and longer despite the fact that we are becoming increasingly skilful and more efficient at production. Intuitively this should mean that we have to do less work. But the pressure to do more work increases competition and also increases the production of unnecessary products. The highly competitive business environment has to find ways of getting us to consume these products. People need jobs and so they have to work within this system and so the whole process is continually reinforced.

The vicious circle of debt growth is responsible for the society we have. We are labelled as a 'consumer society' and believe that business is just trying to satisfy our desire to consume. But the consumer society is a natural symptom that arises in a society subject to the forces imposed by the debt money system. At the same time, the increasing personal borrowing secured against property (See Table 1, Ch 3.1) contributes to the inflating value of house prices in relation to income, exacerbating the unfair effects on the poor of the transfer of wealth caused by interest.

Money is not supplied into the economy; it has to be borrowed into existence by actors within it. Given that money is created as a debt it follows that repayment of that debt leads to a contraction in the money supply. The system is susceptible to tip from a state of expansion to contraction. This can happen as a result of many complex influences, but if we take 'investment' as an example:

With growth dependent on borrowing, in turn it has also become dependent on investment through borrowed money; investment in science and technology, infrastructure, and plant and machinery. This investment is made with borrowed money and spent with the intention of earning more as a result. Across the economy many are employed through this investment. It behaves like a positive feedback, and as investment grows our whole culture absorbs and adapts to the increased money supply with increased production, spending, and consumption. In business, investment can lead to an advantage but then other businesses are forced to invest in order to compete. A side effect of this is continued expansion of organisations away from the most efficient size to provide what we need, while also increasing resource use. But the investment cannot go on forever, and is itself subject to many external forces (political change, war, natural disaster, global stock markets, currency speculation etc – a multitude of factors which interact in complex ways). External stimuli can take the pressure on investment to a tipping point making further lending for investment, or investment itself, unattractive. This lack of investment then contracts the money supply, jobs depending on investment are lost and reduced spending spreads through the economy. We enter a positive feedback again, but this time leading to recession.

Competitive support industries spring up in the same way. Taking advertising as an example, as one company advertises it achieves an advantage over those that do not, forcing competitors to do the same. This again leads to a spiral in advertising spend with each business trying to either take a step ahead or trying to keep up but there is

no net benefit across the whole system. It results in a whole industry funded by businesses that could be spending the money in more productive ways or reducing costs to the consumer.

The banks themselves are in control of the money supply and so the economy is in their hands. The pressures on banks play a major part in the 'boom and bust' economic cycle. The threat of a bank run should act as a controlling factor in the money creation activities of the banks but their motivation is to maximise profit. They do this by issuing more interest-bearing debt - creating more money. In boom times debt expands quickly but again external stimuli can change the outlook making lending riskier and so new debt is reduced. The negative effects of this change ripple through the economy and we enter the 'bust' phase of the cycle.

We have repeatedly seen the effects of this in the real economy since the credit crunch hit in summer 2007. Lenders have had to become more careful, and therefore have reduced the amount of lending available. This is sensible from anyone's point of view as it reduces irresponsible lending. However, Central Banks have pumped hundreds of billions of pounds into the banking market with the explicit intention of encouraging them to continue lending so that the money supply can continue to expand.

These behaviours of a system built on money created as debt show a little about how we have become slaves to money. A more human consequence of the system, over recent years, is that it has dramatically changed our relationship to debt. We are encouraged to borrow as much as we can afford and then to borrow more, leaving increasing numbers with an ever-expanding debt burden. Michael Rowbotham says borrowing has become like a supplementary income for people. Access to debt had become so easy for the majority, prior to the credit crunch, that people used it to fund their consumption without due consideration of the burden they were taking on. Debt amounts to the spending of future earnings, therefore limiting the amount of those earnings available for future use. Debt should be taken on as part of a strategy to increase our financial security. It is important that our relationship to debt becomes more responsible, so we live within our means rather than continually borrowing from the future. However this seems unlikely while the economy as a whole is run along the same lines of taking on ever more debt.

2.4 Conclusion

In this section I have covered the features of the money system, the role of banks in creating money and interest, and their effects on society that are relevant to the next part of this report about a different way of banking. Less relevant to this discussion are the structure of the currency system, and the role of government or central banks. However, these issues also need addressing in changing the money system as a whole. For instance why do governments relinquish the right to produce money, and instead borrow it at interest from the central bank, or from the bond market? What would happen if governments produced money themselves and spent it into the economy interest-free, or used it to provide a basic income to every citizen, thereby doing away with the complex and inefficient benefits system? These are solutions being proposed to deal with the “money as debt” system and to alleviate the scarcity of money.¹⁹ However many questions remain about these propositions.

Once the nature of our financial system is recognised and understood then hopefully it is clear that an alternative is needed. Of course it is extremely difficult to produce a design for a perfect financial system, which can be implemented without causing massive disruption and subsequent recession. The financial system we have has not arisen in isolation, it has had influence throughout society and society is as it is partly because of the financial system. As changes are made to counter the harmful effects of the monetary system, great care has to be taken to understand and monitor how these changes are being adapted to and what consequences there are. It is important for flexibility to be built in to any systemic change. Reform is unpredictable as it is making change to a core structure that society is built upon, and we will need to learn as we go along. While this unpredictability and lack of certainty can be used by protectors of the status quo as an argument against change, staying as we are is an act of submission to a system that is clearly failing in regard to long term goals.

What I have tried to show is that the money and banking systems we have are fundamental to producing the need for growth, the feelings of scarcity and the dominant competitive behaviour discussed in Chapter 1. Creating money out of nothing and charging interest on it may be the most important factor in driving humans beyond the means that nature provides. Understanding that the growth is achieved by increasing debt shows that the system we have can never provide universal prosperity. That all debt must be paid back with interest transfers money to the richest and penalises everyone else.

In reading responses to the views I am expressing here, there are two main arguments against them. The first is that to offer these views is to disrespect the benefits of growth and to wish for a return to the widespread poverty of old. I am not trying to argue that our society has not benefitted from economic growth, or even that no future growth should occur. I am saying that future economic activity and growth must be grounded in an intelligent system that is innately equitable, respects the

environment as a vital finite resource with its own right to flourish, and which equates the importance of the future with that of the present.

The second common criticism comes from the standpoint that the system we have is inevitable and that the views I express are naive. To this I say that the system we have is a human creation. The belief that it is inevitable comes from living within it for so long. It is in our power to change it. I have no interest in creating argument or division between viewpoints. My want is for us to recognise what we have and what the effects are, both good and bad, and try to do things in a better way.

As I explained in Chapter 1, a big part of doing things in a better way for me is for our systems and structures to be coherent with what it is to be human. Therefore a part of the solution is to have financial institutions that incorporate these characteristics and have humans, rather than money, as the focus.

In analysing the money system, banks play a prominent part. Like in so many areas of business, the main banks have become major multinationals. Driven by the profit motive, and the money system they perpetuate, they become bigger and bigger. They have lost touch with the society that they should be serving as custodians of our money.

There are several organisations trying different approaches to lending and borrowing, addressing a number of negative issues around current banking practice. With many people unhappy with the high profits and high costs to the consumer of the large banks, and the ongoing events in the industry highlighting some of its inherent problems, the timing is very good for demonstrating new approaches to banking.

In the next part of this dissertation I will focus on the case of the Swedish JAK Members Bank; a bank that doesn't charge interest and a bank which, to me, instinctively sounded like a great idea.

PART 2: THE CASE OF JAK MEMBERS BANK

My JAK story started in January with the 'Can the Earth Survive Capitalism' short course. I had been planning a dissertation around eco-education, but as soon as I heard about JAK I was excited and immediately thought I could set one up. I can't explain why I felt this. I don't have banking or finance experience; I just instinctively felt that JAK was a good thing.

The first thing I did was search the internet for information on JAK. What I learnt came mainly from two reports written by Ana Carrie for FEASTA, The Foundation for the Economics of Sustainability in Ireland, and Mark Anielski for VanCity Savings Credit Union in Canada. These reports provided a good amount of information and left me still feeling very positive but with many questions unanswered. I decided that to find out more the best thing to do would be to visit the JAK office in Sweden. I contacted JAK and was put in touch with Hans Gefvert, a former JAK Bank Manager, who no longer works for the bank but retains a great interest and wants to see the idea spread. A visit was organised to spend time at the JAK office in Skövde and also with Hans in Gothenburg.

At the JAK office I met individually with Magnus Frank, the Bank Manager, Yvonne Gustafsson, the Membership Manager and Johan Oppmark, JAK CEO. I was made extremely welcome by the staff at JAK and they were all very keen to help my project. The discussions were friendly and open and for me very enjoyable. The offices themselves, in a converted mansion house, provide an excellent working environment. I was struck by the calm, efficient atmosphere and the motivated staff, getting on with their work with great satisfaction.

Chapter 3: A Description of JAK

JAK Members Bank operates nationwide throughout Sweden. The members own it with a one member, one share, and one vote system. It exists to provide interest-free loans to members and also to educate about the harmful impacts interest has on the economy and therefore society.

3.1 A Brief History

JAK first began in Denmark during the depression of the 1930's. A co-operative society was formed from the belief that interest is a principal cause of economic instability, with the consequences being inflation and high unemployment. The society was named J.A.K., standing for Jord (Land), Arbejde (Labour), Kapital (Capital): the

three foundations of classical economics.¹ The first practical project, in 1931, was the successful issuance of an interest-free currency backed by farmland. As Douthwaite says, alternative currencies tend to be taken up best in a difficult economic climate,² but the currency's success proved a threat to the government and was prohibited after only two years. A second experiment was started in 1934, which was equivalent to the more recent and widespread Local Exchange Trading Systems (LETS) allowing the trade of goods and services without need for cash currency.

The third experiment, an interest-free savings and loan system, was also started in 1934. This worked in a similar way but on a larger scale as 'loan circles', which are used by small groups of people in developing countries. Participants saved together and from these pooled savings they could take it in turns to take an interest-free loan. This initiative, though popular, met with resistance from the authorities and went into liquidation in 1938. However a new savings and loan system was developed and started operating in 1944 and it grew steadily to become licenced as a bank and became one of the 20 largest banks in Denmark. This system allowed people to save interest-free and then borrow a multiple of their savings. This worked well while deposits in the bank were growing, but as growth in deposits began to fall the demand for loans became increasingly difficult to meet. In 1973 JAK was forced into a merger with Bikuben Bank.

After this merger previous JAK members initiated several local JAK savings and loan systems and some of these are still operating today. They are constrained by regulations ensuring that they only operate within their local communities.

JAK in Sweden

A small group of people in Skövde, Sweden, sympathised with the thinking behind JAK in Denmark and in 1965 they formed their own non-profit organisation with the same purposes of relieving people of the interest burden on debts and also to spread information about the effects of interest in the economy. After years of discussion about interest and developing the system, the first loan was issued in 1970 and it took the investment of one million Kronor (approximately £73,000 at today's exchange rates, 05/2008) by a wealthy individual to get the loan system going. Even then growth in the business was very slow over the next two decades. Then, with high interest rates in the late 1980s and the recession of the early 1990s, membership grew rapidly, doubling every year. This level of growth nearly proved catastrophic for JAK. The influx of members was predominantly people searching for personal financial gain, without any feeling for the nature and philosophy of JAK and so they were not committed as members of the bank. The demand for loans became unserviceable and members withdrew their money, exacerbating the lack of liquidity.

The management at this time realised they needed to establish a more stable footing in order to save the bank and set about restructuring the organisation until they were able to successfully apply for a full banking licence in 1997. This brought dramatically

increased regulation but importantly gave JAK more credibility and meant that the government protected members' savings up to a certain level. Since then, JAK has been growing steadily from a firm foundation, with membership increasing at an average of 10% a year.

In 2008 JAK Members Bank in Sweden has 36,000 members with approximately £90 million in savings. It is still run from a central office in Skövde employing 26 staff. A second office has recently opened with two staff in Orlse where there is the highest density of JAK members in the whole of Sweden. Members in the region requested a local office. All JAK business is done by telephone, internet or mail. The account management systems have evolved over the company's history as technology has changed.

The services offered by JAK are still confined to simple savings and loans, meaning that members need to use a second conventional bank for day-to-day transactions. However, projects are underway, again at the request of members, to introduce bill payment services, ATM machines and internet banking. There are no plans to open branches because of the high operating costs and the internet provides the means to efficiently service more people.

3.2 Support for Members and Volunteers

Before explaining how the JAK model works I want to communicate the human side of the JAK operation – how it deals with its members. In the mechanistic view these aspects would be considered separate and secondary to the number crunching core operations of a bank but they are far from secondary to the members. They form part of the authentic whole of the bank which has grown organically over time, built on the core philosophy that interest charges on the use of money are damaging and the desire to do things better. The fact that the relationship with the members is so strong and positive (as I explain below) in relation to conventional banks, demonstrates to me that JAK is making a positive contribution.

A vital part of JAK as a whole, and therefore key to understanding its nature, is the network of member volunteers. The bank does not use any conventional advertising and for all its marketing it relies on this member network. There are currently (March 2008) 650 volunteers organised into local groups throughout Sweden. It is these groups that spread information about JAK, its benefits and services, and about the economy in general. They do this willingly and for no labour cost, demonstrating their commitment to the benefits of the JAK model. For the bank it is important for people to properly understand the thinking behind the bank before, or when, they become members. Discussion with existing members is seen as the best way to share this information. By maintaining a strong relationship with its members JAK Bank is able to play a meaningful role in the community.

JAK employs one person, Yvonne Gustafsson, at its Skövde office to provide support to all the groups. When asked, "Why do members want to start a group?" Yvonne replied,

"oh they love this idea, they burn for it in their hearts."

Three members are needed to start a group and when they have approached JAK with this request Yvonne will then notify all other JAK members in the area that a local group is being formed. But JAK never initiate formation of a group, it always comes from the members. The groups are also free to decide what activities they wish to organise, the most common being study circles about interest-free banking or stalls at conferences and town markets, but are other more innovative ideas such as theatre productions and a JAK café. Once a year the groups can apply to the JAK board for money to cover expenses, but never for salary.

JAK provide educational material and courses are provided at the JAK office for new members or groups. Twice a year there is a JAK school for between sixty and seventy people where the participants spend time at the offices talking to the staff and also undertake classroom learning about the history of JAK, banking and the economy.

A book has been written and a film made by JAK members about JAK and its role in "saving the world". Other members work on how JAK can further benefit society with one project underway hoping to establish a student support loan system. A forum for member discussions has recently been started through the JAK website and a newspaper, called 'Grus & Guld' (Gravel & Gold), is produced 5 times a year and is sent to every household with one or more JAK members. The newspaper is professionally produced containing articles from professional journalists on a wide range of subjects. It also contains news about the bank, information on local group meetings, and an exchange mart. Interestingly it also allows members needing a loan to request savings points from other members. Many members are willing to donate their points to help others get a loan. The paper is very popular with members and another ingredient in building the strong JAK community.

Yvonne sums up the JAK community, saying,

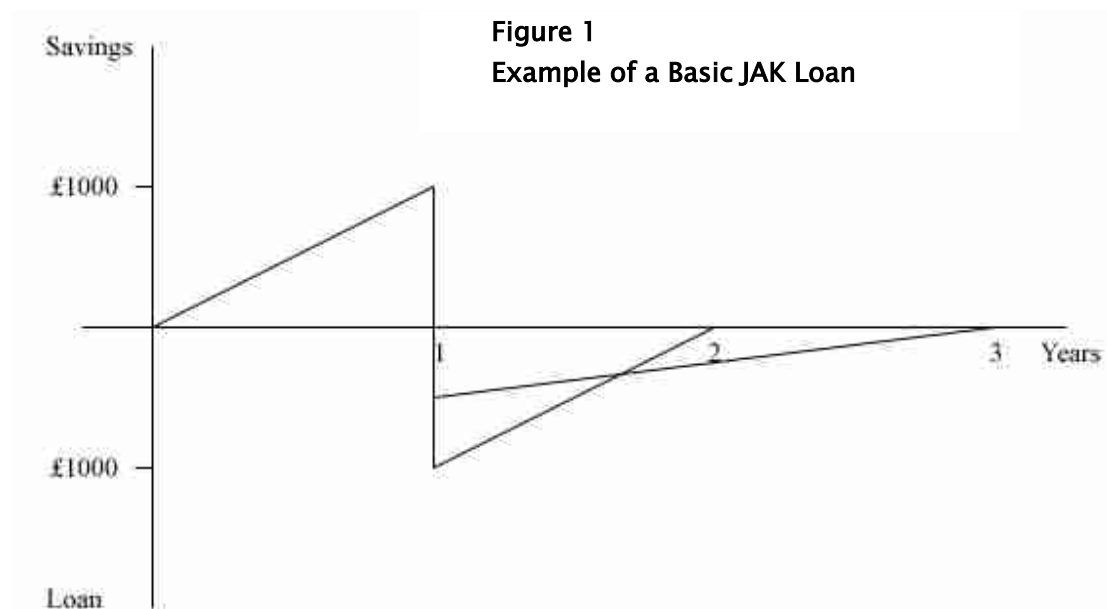
"This is a big thing for customers, a benefit other than savings and loan. The big thing is the cooperation; the small thing is the bank, to show that it is not just play. It is real and it is working. Very special."

3.3 How It Works: The Saving and Loan System

The JAK loan system has evolved through various stages through its history to its present highly flexible and controllable version. For the sake of simplicity I am not going to elaborate on how things used to be done (See Anielski for more details).

JAK is essentially a saving and loan system that does not pay any interest on savings nor charge interest on loans. An instinctive question often asked by people when they consider this is, "Why would anybody save without interest?" The principle behind JAK is that the people saving are doing so because they want to borrow. The key to understanding the JAK system is that every borrower has to achieve a balance between their saving and borrowing.

The following diagram shows a JAK style saving and loan in its simplest form (Pounds are used for the British context)

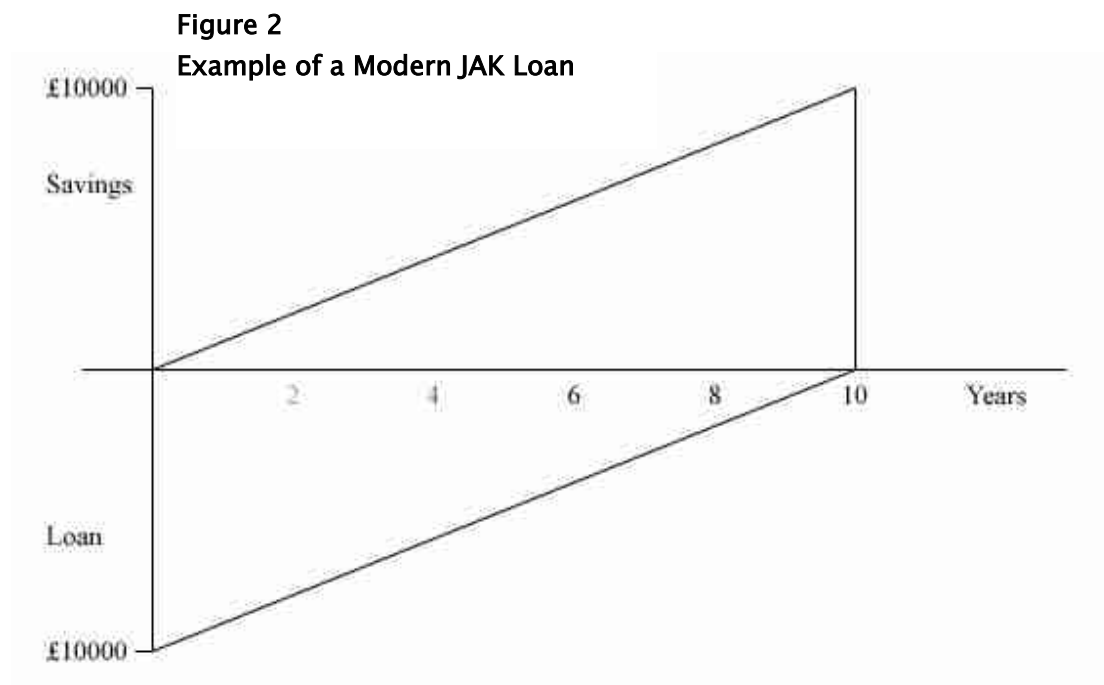


In these charts we see savings represented on the positive y-axis and borrowing on the negative y-axis, with time in years along the x-axis. In this case savings of £1000 are built up steadily over the first year. At that point the savings are withdrawn and a loan of £1000 is taken, to be paid off over the next year. This shows the balance required in the system between saving and borrowing, and we can start to see the reciprocal nature of the JAK system. The member has provided their savings, which others have been able to borrow over the first year and therefore the member can get the same use of others' money. The areas above and below the x-axis balance. Another loan option shown would be to borrow £500 to be paid off over the next two years, again balancing the area either side of the x-axis.

The essence of the system is shown in this graph. The member has to provide the use of their savings to the same degree as they borrow from others. In this first example

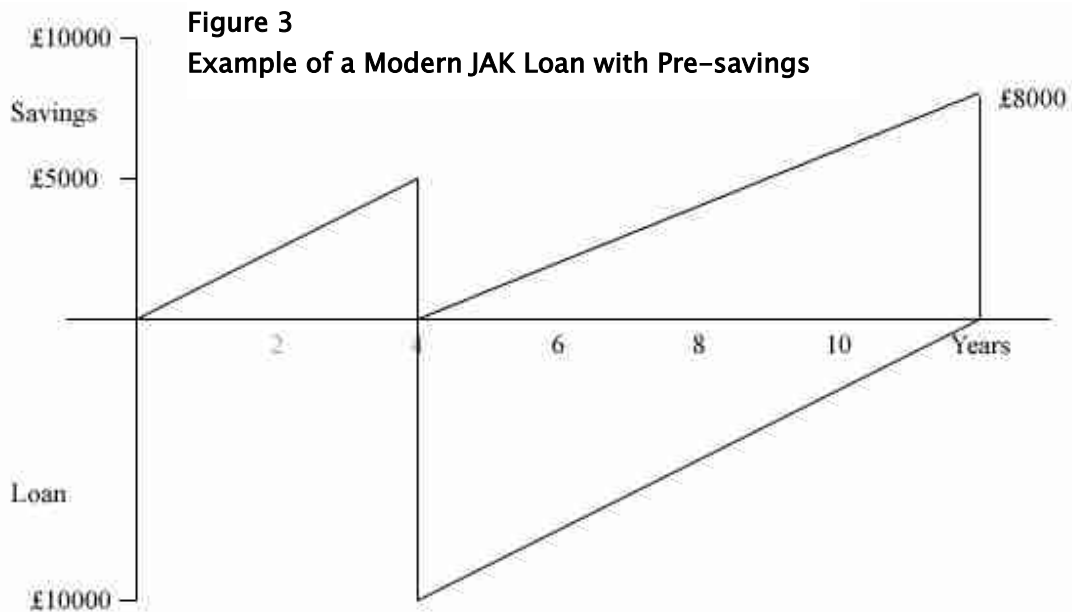
the benefit to the member can be seen; the member has effectively saved £2000 over 2 years but has actually had the £2000 to spend after only one year.

Now we can move onto how the system now works in Sweden where money can be borrowed before any saving has taken place:



In this example £10,000 is borrowed immediately, to be paid off over ten years. Again the member has to provide the use of their savings to match their borrowing and so savings of £10,000 also need to be built up over the ten years. For the member, they will effectively save £20,000 over the ten years, but they will be able to spend half, £10,000, straight away and receive the other half at the end of the ten years. Savings that take place concurrently with repaying the loan will from here on be referred to as supplementary savings.

A member still has the option to save prior to taking a loan (known as pre-savings) and this would benefit the member by reducing the amount they have to borrow, and /or require less supplementary savings. This slightly complicates the simple calculations. JAK use a savings points system, and in reality they do not balance the savings and loans, they require a balance in savings points. Supplementary savings of £1 for one month would earn 1 savings point. Borrowing £1 for one month 'costs' 1 saving point. So far this makes no difference to the example above, but in the case of pre-savings, £1 saved for 1 month currently earns only 0.8 savings points. This flexible pre-savings points factor provides an important lever to control the macro balance in the system between savings and loans. If the factor was 1 as with supplementary savings then the bank is at risk of receiving too much demand for loans meaning rationing has to take place thereby reducing member satisfaction. The following chart shows how this affects a member saving requirement:



Here £5000 has been pre-saved over the first 4 years. Then these savings are withdrawn and a £10,000 loan is taken out, to be repaid over the next 8 years. Now lets look at the supplementary saving requirement in this situation:

Pre-savings are only worth 0.8 of supplementary savings and we can relate this directly to the areas under the graph, so,

$$\begin{aligned} \text{Pre-saving area} &= (5,000 \times 4) / 2 = 10,000 \\ \text{Pre-saving points} &= 10,000 \times 0.8 = 8,000 \end{aligned}$$

$$\begin{aligned} \text{Loan area (and points)} &= (-10,000 \times 8) / 2 \\ &= -40,000 \end{aligned}$$

$$\begin{aligned} \text{Therefore supplementary saving area required} &= 40,000 - 8,000 \\ &= 32,000 \end{aligned}$$

$$\begin{aligned} \text{Final supplementary savings amount} &= (32,000 \times 2) / 8 \\ &= \text{£}8,000 \end{aligned}$$

So, in the above example £8,000 is saved concurrently with the repaying of the loan.

Members have no access to supplementary savings while they still have a loan outstanding. Once the loan has been repaid in full the members supplementary savings are transferred into their normal account and are available for withdrawal. If they are not withdrawn then they will immediately start to accumulate savings points with the pre-savings factor of 0.8 points per pound per month.

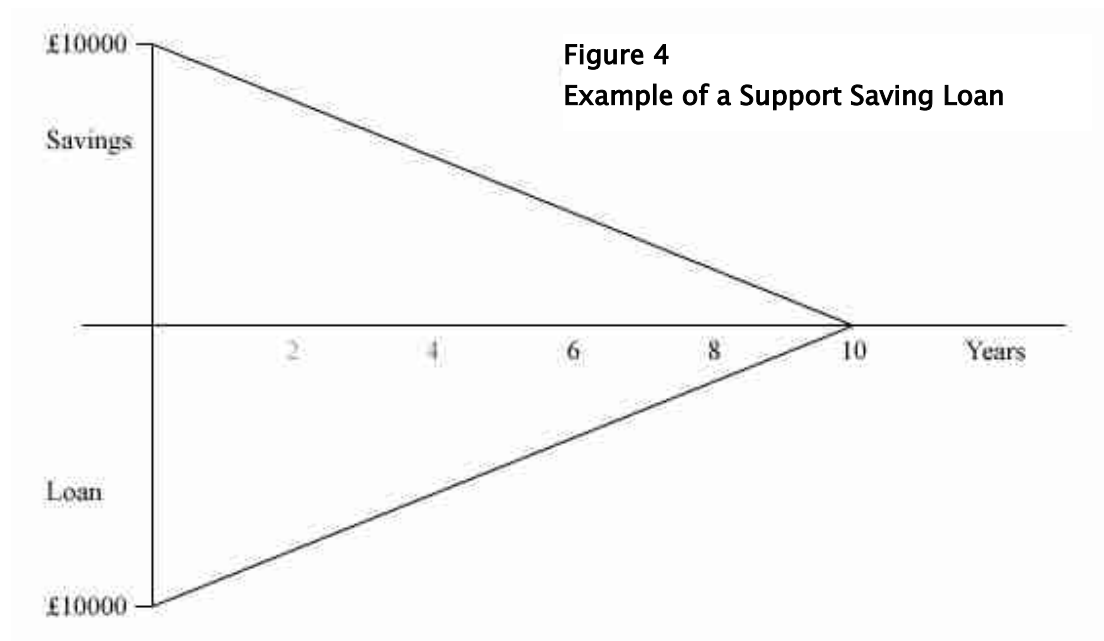
Pre-savings are available for withdrawal on demand, but once savings points are accumulated they stay regardless of whether withdrawals are made from the account.

The only way savings points get used up is in the taking of a loan. It is important to note, however, that savings points can be donated to other members, reducing the recipient's need for supplementary savings when taking a loan. The benefits of this will be discussed in the analysis of JAK below.

3.4 Support Saving Loan

JAK are certainly motivated by social benefit. The socio-economic profile of the membership leans towards well-educated people with awareness of environmental and social problems and a desire to make improvements.

For this reason JAK has developed the 'Support Saving Loan' system whereby members can use their savings to support a local project. Members can move savings into a support account. When savings in the account match the project's loan request the loan is granted (providing there is the ability to repay, but no security is required) and can be repaid, interest-free, without the need for the project to make supplementary savings. The members' savings can be transferred back to their normal accounts in line with the loan being paid off. The following diagram shows this model:



This allows the project to have an interest-free loan and for the members it is an innovative way of helping organisations without the personal risk of investing in it directly. If the member decides that they no longer support the project they can take their money out of the support account but this will then put a supplementary savings requirement onto the project. It is up to the project to gather and maintain the necessary support. As of March 2008 approximately 30 of these support loans had been issued with varying degrees of success.

3.5 JAK's Income and the Loan Fee

Another common question after learning of the JAK interest-free system is to ask, "So how do they make any money?" or "How do they cover their costs?" There are three income streams for the bank, which are kept at a minimum level to cover its operating costs. JAK actually aims to make a small profit each year simply for its ongoing security. Any profit is owned by the members but will not be distributed, instead contributing to the bank's reserves and allowing future costs to be kept down.

Firstly, every member pays an annual membership fee of approximately £20. Secondly, JAK's liquidity and capital reserves are invested in interest-bearing government treasury bills and bank accounts. This provides a slight anomaly in the interest-free philosophy. JAK have asked their banks to not pay interest and in compensation not to charge fees, but the banks have been unwilling.

The third source of income is loan fees. Every loan generates a fee worked out as a fixed charge for borrowing each Krona for each day it is borrowed. This provides a very flexible way of calculating the fee, and can be calculated for any payment plan. Assuming a constant payback rate the loan fee will equate to 1.3% of the initial loan amount for each year of the loan. For example a loan of £10,000 taken over 10 years the fee would be $10,000 \times 0.013 \times 10 = £1,300$. Loan fees average out at an equivalent bank loan interest rate of 2.5%, much less than normal personal loans but the member is also not earning any interest on their savings, which they are required to make. The overall relative costs to the member are considered in the Financial Analysis below (Ch 4.3).

Because of the fixed fee, payment plans can be agreed from the outset so that the member knows exactly the payments they need to make.

3.6 Issuing of Loans

Whether a loan is granted depends on the member's ability to make the payments (including the savings), adequate security being offered (most JAK loans are secured against property with some guaranteed by other members) and the supply of liquid assets in the bank which determines the amount of funds available to loan. Based on the liquidity, every member is entitled to a loan of a certain amount called the 'Member loan'. If loan applications in any period exceed the available funds then the loan amounts above the Member Loan will be granted in relation to the members' accrued savings points. In practice, JAK have never had to limit the loans in relation to savings points since the adoption of this system in 2003. All loans are financed by members' deposits. Currently (2008), the maximum single loan amount they will consider is approximately £600,000, a figure based on the bank's reserves and the amount of loans in circulation. If a member wishes to borrow more before paying off

their initial loan, for example if moving to a more expensive house before the original mortgage is paid off, then it is treated as a completely separate new loan, with the same requirement for supplementary savings, ability to pay and security.

3.7 Additional Information

JAK does not deal with cash transactions. They have no branches and the system is entirely electronic. Nearly all members have a conventional bank account as well as a JAK account. Ninety percent of loans are made to individuals with the remaining ten percent to businesses or other organisations. The average loan period is ten years. The most common purposes for a loan are to pay off existing conventional loans or to contribute to house purchases. A large majority of new JAK members already have conventional interest-bearing loans and a large part of JAK's member service is in helping members find the right balance between JAK and conventional loans.

Unlike conventional banks JAK does not access any external capital. Government regulations stipulate that the bank must hold adequate reserves of its own capital and on the face of it, the way to do this would be to build up reserves out of company profits. However, being a member owned bank, JAK only wants to make the minimum profit to give it stability. If excess profits were made to build capital it would be counterproductive to trying to benefit the members. JAK have therefore developed a different way of achieving their capital reserves.

When a loan is taken the member has to provide the bank with an amount equal to 6% of the loan, to be held by JAK as an Equity Deposit. This money is legally owned by the bank and forms its reserves thereby meeting its regulatory reserve requirement. The bank can draw on these Equity Deposit reserves if it accumulates losses. The money is returned to the member after the loan has been fully repaid, but until then the member has taken on the risk that they might not get it back. Because the risk is so low (these funds have never had to be called upon by the bank) it is seen as a better solution than increasing costs to generate profit. In practice, members accept the Equity Deposit requirement without any problem.

Any bank needs to carefully manage liquidity and this is especially the case for JAK. All loans are made out of members' deposits and they will only lend out 80% of deposits keeping 20% as a liquidity buffer in case of unusually large withdrawals.

JAK does suffer some losses from unpaid loans but these are very low, approximately 1%, and significantly lower than those suffered by mainstream banks. Low losses mean that costs to the members are kept low.

Chapter 4: My Analysis of JAK

4.1 The Philosophy

As we have learnt in studying Holistic Science, in order to understand something authentically, we must understand where it has come from and the meaning inherent within it. Before critiquing the JAK system then, I first want to discuss the philosophy behind it, as this is more fundamental than the detailed practical characteristics. Secondly, we have learnt that to achieve an authentic understanding we need to be 'upstream'. Our intellect is conditioned by the world we live in and our thinking about banks and finance is conditioned by all our direct and indirect experience of it which, while forming opinions, has also given us a narrow idea of what banking and finance are. In looking at new ways, we must put our assumptions on hold so that we are seeing with fresh eyes.¹

It is also unusual when discussing finance to be talking about philosophy. Even more than the economy as a whole, finance is the stuff of numbers and is judged by the numbers. I discussed, in Chapter 1, the need for all our human constructions to fit in with a philosophy derived from an authentic understanding of what it is to be human in this world. The intellect alone can be dangerous and misleading in this respect. It is important that we attune with our senses, feelings, intuition and thinking equally. Again, I would ask readers to consider the following discussion on that basis.

The principal ideological basis for JAK is the opposition to making money on money which occurs with interest charges. As JAK Chief Executive Johan Oppmark explained,

"I don't have the solution to the money creation problem. But we are looking at the interest problem because I think it is demoralising that we can have 2 people with money living off the interest without any work and without risk and we are out in the fields sweating to produce food for them and having to pay more than we borrow. Perhaps if we don't have interest maybe they can come out and help us in the fields."

Because of this ideological position, JAK aims to disseminate information about the harmful effects of interest on society and wants to inform people of alternatives. The JAK philosophy is then to pursue the ideological position in a humble but practical way by managing an interest-free savings and loan system demonstrating the feasibility of their ideological position whilst helping people escape the burden of interest. Each person that I spoke to at the bank, staff and members, had no grand ambitions about revolutionising the economy, they just wanted to do things better and demonstrate to others that they were doing it. Again from Johan Oppmark in response to the question "Would you like to challenge the regular banking model?",

"I don't want to change the world. What I like to do is not have to use the large banks myself. We could have another strategy for getting the interest-free society. We could

start an interest-free lobby company and say “you should do this” and lobby and try to influence. But the way we do it is to have a bank. I like it because I don’t get or pay interest, and then we get people to start using it, and then we get people outside who see it and who start to use it. This is our principle. Don’t tell people what they should do. Do it by yourself, show it by practice that it is working and that it is good. This is why I say I don’t want to change the whole world or Sweden; I want to use it because I think it is neat. That’s why I do it.”

I like this quote as it ties in well with my thinking about starting a JAK Bank in the UK. From initial despair that there was no chance of changing society enough to make it sustainable and that one person cannot make a difference, Holistic Science has given me the understanding that as individuals we don’t need to be concerned with changing the world. The important thing is for me to take appropriate action as a part of the wider complex system. Satisfaction comes from taking that action itself, while the action contributes to evolution of the whole system.

The two quotes above sum up the philosophy of JAK Members Bank in ideological and practical terms. However, I believe that the system JAK uses has further characteristics that fit in with a wider philosophy consistent with that of Deep Ecology.

There are some things we are told throughout our childhood, and I know from experience that we also naturally return to them when we have children of our own. I believe these are truths that we know are right, not intellectually but intuitively. The three written here below all characterise the JAK system, all are interlinked and provide wisdom about how we should be living together in this world.

Do for others, as you would like them to do for you.

This is the Golden Rule of ethics and can be found, expressed in different ways, as a core moral value throughout world religions and cultures. It is accepted as the basis for human rights, and in less anthropocentric terms as a basis for the rights of all life. We have all heard it and, I believe, we all know it to be good advice. Criticism can be made by looking at the statement from a certain angle, e.g. “how do you know others want to be treated the same as you?”, but this is to miss the essence. The intention and meaning behind the statement are clear. It is not about specific and precise examples but about equality and respect for others.

The ethic fits extremely well with my Deep Ecological perspective. At the core of Deep Ecology is the view that all life has intrinsic value, which leads directly to treating all life with respect and consideration. Yet the meaning goes much deeper than just treating others with respect out of decency. Both the Golden Rule and Deep Ecology are powerful because of the recognition that, through this inter-connectedness of all life, what is good for others is also good for us.

"If you want others to be happy, practice compassion. If you want to be happy, practice compassion." Dalai Lama²

The Golden Rule implies a way of being in the world that is for the common good and through benefiting the whole the individual is also better off. In Deep Ecology this is evident in Naess's Self-Realisation as the ultimate norm.³

In science, and more specifically biology, evidence of this behaviour has become known as reciprocal altruism, studies of which have been carried out with vampire bat colonies. Vampire bats fly out each night to feed but some bats will return to the colony without finding food which has serious implications because vampire bats generally cannot survive for more than two consecutive nights without food. Often when a bat does return unfed another bat will regurgitate some of its own feed and donate it, thereby reducing its own food reserves. The bats have the ability to learn over time which others in the colony will participate in this altruistic behaviour and which will receive gratefully but not reciprocate (cheaters). Models have been built to represent this type of behaviour and it has been shown that the well being of the colony is greatly improved by the altruistic behaviour, that the individuals are less likely to go hungry and also that increasing the amount of cheaters in the colony has a detrimental effect on the well-being of the colony as a whole.⁴

More complex reciprocal altruistic behaviour has been observed in primates and it is now established in psychology that reciprocal tit-for-tat behaviour is a fundamental characteristic of human behaviour.⁵ This reciprocity is not necessarily positive; we will also tend to reciprocate negative behaviour. Perpetuating a culture in which we see everyone as being out for themselves creates a positive feedback of negative reciprocity. Creating a culture where we behave well to others can lead to a positive feedback of beneficial reciprocity, resilient as the vampire bat colonies are to some level of cheating.

In economics the most established of this type of 'tit-for-tat' model is called the Prisoner's Dilemma⁶, a hypothetical situation described as follows:

The police hold two prisoners, arrested as accomplices in the same crime, but without sufficient evidence for a conviction. Each prisoner is questioned separately and they have had no opportunity to coordinate their actions. Each prisoner is told the following outcomes; If he testifies against his partner he will be released immediately provided the other prisoner does not testify against him. If he and his accomplice both testify they will both be convicted but on a reduced sentence of 5 years due to their assistance. If he does not testify but his partner does he will be convicted and sentenced to ten years. If neither he nor his partner testifies they will be both be sentenced to six months for a minor offence.

The range of outcomes makes up the following matrix:

		Prisoner B	
		Not testify	Testify
Prisoner A	Not testify	6 months\6 months	10 years\ 0 years
	Testify	0 years\10years	5 years\5years

Looking at A's choices, if B doesn't testify A is better off testifying as he will be free rather than get 6 months if he doesn't testify. If B does testify then again A is better off testifying as he will get 5 years as opposed 10 years if he doesn't. Therefore, making a rational choice as defined and expected by traditional economics where an individual maximises self-interest with no regard for anyone else, the prisoners will always be better off if they testify. The result is that they will both be sentenced to 5 years. However, the total pay-off would be maximised by the prisoners cooperating with each other (not testifying) rather than taking a selfish position.

When this scenario is played out as a game contestants usually start off following the 'rational' self-interested route of testifying even though they know it is not the best overall option. This is partly due to fear of being cheated by the other player. But if it is played repeatedly the dominant behaviour becomes cooperation. A player risks that they will be cheated and there is a temptation for themselves to cheat but if they do they know they will be punished in later rounds (reciprocity).

We learn that if we look after the whole we will be better off ourselves. Following the Golden Rule will make us all better off.

You only get out what you put in, or you must put in what you get out.

This is clearly linked to the Golden Rule and is reciprocal in behavioural terms. It gives a practical aspect to the ethical aspect of the Golden Rule. We cannot keep taking from a resource without putting back in. We have no right to expect anything without putting the effort in to merit it. The sense in this is obvious but in our modern culture we are being influenced to expect things without personal effort. Most importantly we are stripping the world of resources without due consideration of the long-term effects and without any thought of replenishment. If we return to a culture which lives by the statement above then we will naturally live within our ecological limits and we will play our part in the continual recycling that characterises nature. As we take nutrients out of the soil for food, we will replenish them with care. As we benefit from the work of others in our communities, then we will offer our own effort to do our bit for the community. As we borrow money we can make sure we provide money for others' to use.

It is better for you individually, and for the group as a whole, if you share rather than selfishly hoard.

It is easy for us to see the truth in this statement when thinking about children. Imagine a group of ten at a party, each having brought a toy. If none of them are willing to share then they are each stuck with only one toy to play with for the party's duration. If however they are all willing to share and put the toys together in the middle then they all have access to all the toys during the party. Which scenario provides the children with the most enjoyment? The benefits of sharing ripple out and are by no means simply about resource use. The children will be able to play with the other children as well, build relationships, increasing the enjoyment during the party but also improving the child's ability to relate and therefore chances for future fulfilment. Looking holistically at this type of behaviour we can see how beneficial it is, not just in a utilitarian way but in terms of community building. Leadership and personal development gurus have long recognised the importance of our relations to others as a part of who we are and a limiting factor of our life satisfaction. Stephen Covey writes about the personal journey from dependence to independence through to achieving the goal of interdependence.

I am not saying that these values have been forgotten in our modern culture. Indeed I think they are still very present and well accepted. But nevertheless they are being suppressed. As qualities became secondary in mechanistic science, so too they became secondary in the science of economic theory. Economic thinking now dominates our culture and particularly our working lives. Around the world I can envision millions of people teaching the above values to their children before going off to work to compete, hoard and take as much as possible. These values have to be re-introduced to working life, and working life has to be seen as part of the whole, not completely separate.

Many people feel that these values are idealistic, that "it is not like that in the real world". I fully accept that there is a constant trade off between pursuing narrow self-interest because we want what is best for ourselves and cooperating with others for a greater gain. I have tried to show through Deep Ecology, Behavioural Ecology, and Game Theory that modern techniques are now supporting the values of cooperation. I am also saying that we all are co-creating the world. If we understand the principle that living by these values leads to everyone's gain then we can take action to develop them in society.

Looking at the JAK Bank model we can see how the above values relate. JAK is a bank of reciprocity. Everyone is treated the same. If you want to borrow money you must let others borrow the same amount of money. Members share their savings, which are used to provide interest-free loans to other members and their families. And as a result, members of JAK are better off by pooling their financial resources and allowing them to be distributed to those who need it. The resources are cycled through the system maximising their use.

The cooperative aspect of JAK goes far deeper than the company ownership. It is fundamental in the actual services of the bank, a remarkable feature that distinguishes it from all other banks. The strength of the volunteer networks, members' commitment to, and satisfaction in using the bank, show the effects of having these values intrinsic to the operations of the company.

4.2 The Machinery

In the meantime, while finding out as much as possible about JAK, a pressing issue in thinking of starting a new bank was to find out about the regulatory framework and how best to legally structure the company. Knowing that I would want it to be cooperatively owned I searched for legal advice on forming a financial cooperative. The result of my enquiries was that I had a meeting to introduce my project to CEU (for Community Enterprise Unit) in Exeter. As a result of this meeting CEU provided me with a list of questions they wanted answers for from my fact-finding trip to Sweden. I am going to use several of those questions, along with those that have arisen in conversations with others, as the basis for much of the analysis below.

The first thing to note is that JAK is a viable enterprise. It is accepted as a fully regulated bank by the Swedish government and its membership is growing. It has a stable and secure financial footing.

What are the benefits to the JAK members of using the bank?

The key comparative advantages over other banks, as described by the JAK management, are that the members are not paying costs for the use of money itself (only for the costs of facilitating the service), that there is no variation in the charges during the course of the loan, that the member gets a lump sum in supplementary savings at the end of the loan, and that the members are part owners of the bank; they vote on board governance and it is run for their benefit. These benefits require further explanation and analysis:

1. As mentioned above, a JAK loan has an average cost equivalent of 2.5% in conventional loan terms. A common response to this is, "so it's not an interest-free bank". Interest charges on a conventional loan are made up of three principal components. The first is to cover the operating costs of the bank, the second is a contribution to profits and the third is the cost imposed for having the use of the money itself. JAK has to cover its costs and so has to make charges but it is not out to maximise profits and most importantly it does not believe that money itself should make more money; there should not be an intrinsic cost of money. It is this component which JAK sees as being what interest really is and the source of its problems. The central bank sets interest rates as the cost of money which then permeate throughout the money supply chain. JAK plays no part in this, and this is why they say they are an

interest-free bank. I believe this is a reasonable position for JAK to take. They make a simple charge for borrowing each Krona for each day it is borrowed as a way of covering its costs.

2. There is no variation in charges throughout the loan because JAK plays no part in the mainstream financial system of fluctuating interest rates. This does provide the member with the benefit of stability and foresight, just as a fixed rate conventional loan would do.
3. The member gets a lump sum of savings once the loan has been fully paid off. However they have had to save this money interest-free. A financial comparison with conventional finance options will be made below (Ch 4.3). The reason JAK management see the savings as a benefit is not purely financial. Firstly, they are aware of their members' pleasure at receiving their savings after paying off their loan – a demonstrative qualitative benefit. Secondly, they rightly say that if members hadn't been with JAK, it is unlikely that they would have saved that money, it would have been spent and so they would not get to the stage where they have savings. Therefore regardless of direct financial comparisons we can see that many JAK members' financial situations are changed for the better by using the bank through a more responsible attitude to borrowing and better money management.
4. That members have voting rights for the company is certainly a benefit in comparison with the majority of banks which are owned by external shareholders. External ownership drives the profit maximising agenda rather than the customer benefit agenda of JAK. Many JAK members came to the bank because they have become tired of ordinary banks, saying, "I don't want to pay their profits". This ownership model is certainly not unique though and can be seen in the Cooperative Bank and the remaining mutually owned building societies here in the UK.

Do members switch completely to JAK loans when they join?

Most JAK borrowers use the loan to pay off all or part of a conventional loan. JAK themselves often recommend not using only JAK for loans because the supplementary savings requirement would make payments too great. Much of the day-to-day work of JAK employees is working with the members to find the best solution in terms of a blend between JAK and conventional loans and the timescale of the loan. To quote JAK Bank Manager, Magnus Frank, "If taking a large, long term JAK loan, then it is nice to get a big sum of savings at the end but they need to live now!"

This means that, contrary to the bank's philosophy, they are still recommending to members that they use interest-bearing loans. In response to this Frank replies, "We can't just live in our own bubble, we live in a system driven by interest, can't just block it out. But we can show another way and spread the ideas. Many members try a loan, a small loan, then in a few years take another loan and build up so all their loans

are with JAK. People who come get interested, attend courses and spread the word. Most members are not too ideological; they are in it for economic benefits. But they become interested.”

“I don’t want to save while I am borrowing. If I could afford to save I wouldn’t borrow.”

This is a common response of people after hearing an explanation of how the JAK system works. I found it difficult to counter for a while until I realised that it highlights a problem in the prevalent attitude to debt.

At the moment we are encouraged by the markets to think in terms of “How much can I afford to borrow?” and then to borrow more whenever possible. This is leaving increasing numbers of people with an ever-expanding debt burden. We need to encourage more responsible thinking around debt, only borrowing what we know we can afford and only as part of a strategy to build financial security. JAK only lends half of what people can afford and makes sure that they save the rest. As mentioned above, debt has become like a supplementary income for people⁷ – a ridiculous and unsustainable situation. JAK treats personal debt in a responsible way, as the prior use of future earnings that are to be saved. To pay back any debt you need to have money available that is not required to be spent otherwise, i.e. if you were not in debt you could save. The following example reframes the view of a JAK loan:

Bank: "How much can you afford to save each month"

Member: "£50, or £600 over a year"

Bank: "Ok, but you say you need some money right away, so save £50 a month with JAK for a year and we will give you £300 now and £300 pounds at the end of the year"

In these simple terms we can see that with a responsible attitude to the money we have available to save, by using a JAK system we can access our future savings in advance.

Interest acts as an incentive to repay debt. If there is no interest charged then what incentive is there?

In JAK the incentive is to get your savings back. If payments aren’t made on time it will mean that either more savings have to be made or they will have to stay in the bank for longer in order to achieve the balance between savings and loans.

Is JAK still a part of the money creation system?

I have struggled to answer this question with any definitive clarity. Here I will provide my current views on the issue having given it considerable thought.

Here is JAK CEO Johan Oppmark’s answer, “Yes because we are one of the banks. If you stop the increasing of loans you get it better but you can’t stop that quickly because the whole system is built on it. One of the problems is in the interest. If we start a new country with £1 [in a bank], as soon as someone borrows it then we have

£2, but with the interest we need more than £2. The actual money in our [JAK's] system doesn't exist. We don't have any handling of cash. You have to transfer to another bank and then go there to withdraw. So we are part of that problem."

Richard Douthwaite has been quoted as saying that JAK does not play a part in the "money created as debt" system⁸ but when I questioned him on this point he was less certain, stating that it depended on whether savings (the money from which all loans are made) are available for withdrawal whilst the loans are outstanding. This is the crux of the matter.

To recap, in a conventional bank with a 10:1 fractional reserve requirement, if a customer deposits £100 then the bank can lend out £90 of that money keeping the other £10 as the 10% reserve. However the £100 deposit is still available for withdrawal so that in total £190 is available in the system. All of JAK's lending comes from depositors' money and given that they keep 20% of these deposits as a liquidity buffer then on the face of it JAK is operating fractional reserve banking at a ratio of 5:1 and therefore is part of the money creation system.

However we must remember that supplementary savings cannot be withdrawn until the loan has been paid off. Therefore if we consider a JAK system in which no pre-savings can be made, then all loans would be made from reserves of locked-in supplementary savings. This would mean that across the whole bank no new money is being created. Money creation is occurring whenever JAK have more loans outstanding than they have in locked-in supplementary savings, i.e. they are lending out pre-savings. As is clear in Oppmark's comments above, JAK are not involved in trying to avoid money creation. However JAK aims to keep pre-savings at the minimum level to achieve the 20% liquidity buffer and so money creation in the system is kept low in my opinion.

With an Equity Deposit, security, loan fees and supplementary savings requirements, is JAK only suitable for a middle class market where people are already financially secure?

Another common reaction to learning about the JAK model is that it favours the middle classes, and with the requirement to save at the same time as paying off the loan, it is prohibitive to people on low incomes and so of little help to the financially excluded.

Through my conversations with CEU, directors of which have banking and community finance experience, they were interested in my project and following my visit to Sweden it was agreed that they would apply for funding to the Friends Provident Foundation for a project 'Researching the transferability of the JAK Bank to the UK'. The Foundation has a particular interest in funding projects targeted to benefit financially excluded people in the UK and this has prompted specific thought into how the JAK model could be used for this purpose. A concept paper was submitted, Appendix 1, and following a request for more information a further briefing note was

presented. It has been exciting for me to stimulate this application and to be involved in the process. The application has now been accepted through to the next round and I look forward to being involved in producing the proposal. Success with the application would be a fantastic help to getting a JAK system started in the UK.

Johan Oppmark comments, *“Last year we made a survey through the members’ paper where we asked for the household income and I think it was rather high so quite middle class. But I think it can work for lower income earners, it just depends on how big a loan you have. We have members who have payment problems with loan sharks. They have paid to them 3000 Kronor a month, year after year, and they never pay off the debt, they are only paying the interest. Then they get a loan from us and we pay off that loan and then they pay us 3000 a month but 90% is repayment and supplementary savings. So after 5 years I had one woman who was 55 years old and she got her supplementary savings and it was the first time she had ever had money in a savings account. So I think it can work well for working class people. We also have the support saving loan.”*

There are four areas in which I think a JAK system could benefit less well-off and financially excluded people, two of which are mentioned in Oppmark’s comments. Firstly, and importantly, the principles behind the model offer inclusion and empowerment to members. Every member is treated the same. There are no different terms for a loan of £50 than one of £50,000.

Secondly, JAK provides a better financial option to those burdened with very high interest loans. The financially excluded are specifically targeted by doorstep lenders charging high interest on loans. Loans that “amass APRs of 1,000 per cent and even 2,000 per cent are not unusual”.⁹ JAK is not unique in offering a better financial option than doorstep lenders. Credit Unions and Community Development Finance Institutions are examples of efforts to benefit the financially excluded.

Thirdly the support network of JAK can be very powerful in educating financially excluded people about money and debt (lack of knowledge is preyed upon by doorstep lenders) and provide motivation and group support in the repayment of loans. Micro-credit (see Ch 5.4) has shown how having borrowers regularly meeting in groups strengthens their commitment to repaying the loan and bestows a subsequent ripple of benefits that come from this type of support.

These three benefits represent the JAK system as it is but I believe there is also an opportunity for targeting part of the system towards helping financially excluded people. This is by allowing members to demonstrate another core human value – it is good to help people. JAK in Sweden have introduced the ‘support saving loan’ and many members also donate savings points to others. There are also many members who are simply happy to leave some of their savings in JAK, not earning any interest, because they believe in the nature of the company. Millions of people give money to charity every year. There is a growing number of people who are realising that they

would like their money to be used in better ways and to have a say in how it is used (I have met several people saying this during my conversations around finance). JAK offers the potential for people to offer their money to help people without giving it away and without risking it in any way.

I foresee having saving point funds within the system for people to donate points to be directed for specific purposes, e.g. renewable energy fund, financial exclusion fund, local community funds (local members could ask for a fund to be set up for their own area). These points funds would then mean that money could be lent for specific causes without interest charges and without the need for supplementary savings. An established JAK system could channel a lot of funds in this way.

This possibility excites me because I think it has great potential. The timing is good for providing this sort of mechanism with the increasing level of interest in social enterprise and ethical investment. I think that it has such potential that an organisation could be set up specifically for this purpose.

Can the scheme be directed towards support for social/environmental benefit?

The way to achieve this is by using savings points funds as outlined above. JAK do not target loans in any way towards social or environmental benefit. Once a system is well established it becomes very difficult to do this because of the difficulty of enforcement with most loans being granted by telephone to members far away. If initiating a JAK system in the UK it would be possible to ensure that the first loans are targeted and the nature of the company could (and should) have a strong social and environmental leaning. This leaning can be especially manifested within the members' networks and educational programmes.

Why has the JAK model not been taken up elsewhere?

The system itself is not so easy to understand and most people are influenced by the assumption that borrowing money means paying interest. Some people who hear about JAK believe that it requires sacrifice because it is based on ideology and that you have to lose money to follow that ideological purpose. This means that thinking around the JAK concept has been limited.

However, some have analysed JAK further (Ana Carrie, Mark Anielski) and realised its positive nature. Anielski's 2004 report was produced for VanCity Savings Credit Union, the largest credit union in British Columbia, Canada with over 286,000 members. I asked Anielski about VanCity's response, "Bob Williams, former chair of Van City, while interested in the idea of a JAK bank within VanCity (a kind of incubator) did not see the option as a strategic advantage to them. I have learned that this may be because bankers are so narrowly focused on the management of the spread between interest paid on savings and received on loans that they cannot fathom a bank that simply ensures that its full operating costs are covered by loan fees and membership fees without the need to charge interest on money on deposit that is available for lending. It seems incomprehensible to most traditional bankers that JAK could possibly survive,

yet JAK has flourished with a healthy 20% set aside in Swedish Treasury reserves as a hedge against potential default of borrowers.”

I think the main reason why JAK has not spread is lack of knowledge; Firstly about the harmful effects of interest, and secondly about JAK itself. Awareness of the “money as debt” system is growing and the problems are again manifesting around the world economy. With holistic (systems) thinking entering the mainstream, the timing is good to spread information about JAK. Swedish JAK has never had an intention to spread JAK outside Sweden and the board is traditionally very conservative. As a member-owned bank the focus is on looking after the existing members rather than spreading the concept. However former JAK bank manager, Hans Gefvert, has worked to help groups in India and New Zealand to start JAK systems. These are in the very early stages and being established on a very small scale with volunteer labour.

How well has JAK achieved its aims, including changing the transfer of money from poor to the rich that occurs through interest charges?

JAK do not measure the social impact of the bank in any way other than the amount of interest-free loans they have provided. But they certainly believe in the benefits. To quote Hans Gefvert, *“Many people in Sweden can tell about the economic relief when they have repaid the loan and got their savings which they have paid every month instead of interest. I think every man who has tried it can declare that the idea is wonderful.”*

Because each member that borrows is also saving then if they were using conventional finance they would be earning and paying interest, so little transfer would be taking place. However on the larger scale JAK are taking people and resources out of the destructive mainstream financial system.

What are the lending criteria and how flexible are they?

The only criteria are ability to repay including supplementary savings requirement, and sufficient security against the loan. JAK use a conventional credit scoring company and also have their own software to gauge a person’s ability to pay.

What is the critical mass of deposits/loans to make it work?

I don’t think there is any critical mass in itself. It depends on the expectations from the members. In theory the system can work for a very small group of people. In order to support a paid employee it will really depend on raising capital to fund initial loans and for the business start up. It was many years before the founder of JAK started to take a part time salary. More information about this is given in the consideration about how to start a JAK Bank in the UK below (Ch 5).

How much bad debt has JAK experienced – how is this then covered?

Very small losses have been made in the business, much less than ordinary banks, the main reason being that people really want to pay the loan in order to collect their own

supplementary savings. This is a strong psychological incentive. Members are also generally interested in the bank and less likely to default. The supplementary savings also strongly influence the level of security on loans. After half way through repayment there is no remaining risk to JAK. All losses that have been incurred have been covered by the annual income. If members default on payments then it is treated much the same as a conventional bank loan. Efforts are made to help the member with a new payment plan or a little leeway but with persistent defaults credit control methods are used.

Up to 75% of the value of a property can be taken as security.

How would a JAK model cope with rising inflation?

Hans Gefvert, *"No problem at all. Inflation influences both savings and loans and since every member – in the end – has had savings and loans, there will be no problems at all – for the individual."* I agree that a like for like comparison with conventional finance across savings and loans (See Financial Analysis, Ch 4.3) negates the impact of inflation. However I believe that higher inflation will have a psychological effect on people, deterring them from becoming members.

Inflation has not been a problem for JAK Sweden, though average inflation in Sweden has been one of the lowest among European countries since the mid-1990s.¹⁰

Do you consider the JAK model as transferable to other countries? How flexible is it?

Hans Gefvert, *"It is indeed very transferable. I compare the JAK model with digital clocks and watches around the world. Every clock can have a very different appearance, but at the back of each clock you see the same mechanism. And so it is with JAK: you can change many rules and the appearance of the model as long as you follow and understand the simple workings of the mechanism behind the surface."*

There may be regulatory difficulties in establishing a new JAK system in other countries. Banking sectors are highly regulated and often prohibitively difficult markets to enter. Differences in culture could also pose problems. Sweden is relatively liberal and has a strong culture of volunteering, of making unpaid contribution to society, whether kids' football, helping old people or anything else. According to Yvonne Gustafsson, *"it is not surprising that many members want to volunteer [in Sweden] but it may make it more difficult to get going in a country without that culture."*

When JAK was being set up what did they get wrong before the present model was developed?

They were too kind to their members; they allowed them too much flexibility on loan repayments. It is very important in the beginning to inform the members of the basic rules and ask them to understand it. The first members need to accept some flexibility, for example in the amount of savings points earned, while the system builds up to a stable situation. JAK were also slow to understand the importance of

equity capital. It is also important to keep the money in the system out on loan to keep the system running efficiently (See Ch 5).

JAK have not developed other banking products – why is this?

They are in the process of expanding their operations and are working on a number of ideas. The conservative nature of the board makes it difficult and there are at least two camps that disagree on the direction of development. To introduce new products requires investment and therefore costs to the members. Some argue that the first job should be on maximising the potential of the existing operations.

How do JAK see their future and the potential size of their market?

Under the current board the aim is for steady but easily manageable growth. However there is a growing movement within the membership for a more dynamic strategy based on the desire to see JAK expand to its potential and really make a difference in the Swedish banking sector. A JAK system cannot grow too quickly without a new influx of funds and so potential for affecting real change is limited in the short-term.

What factors have held back the development of JAK?

Many factors have been involved. Firstly the nature of the model is that it takes a long time to grow. Other influences cited by Hans Gefvert are, periods of poor management, lack of understanding of the JAK system by previous management, and the conservative nature of the board.

Will JAK provide any support for a UK start up? Can the brand be used? What would the relationship be between the two?

JAK will help in providing information as much as they can. The board will not allow them to provide any capital to an overseas project. Everyone I met was very helpful and supportive of the project. The CEO would be willing to provide their database and banking systems but this will require some work on their part which will take time (2–3 years) due to how it fits in with the changes they are making themselves. If a UK JAK develops account management systems itself then Sweden will help in sharing how best to go about that. A UK JAK could use the JAK name but could not be directly associated with JAK Sweden.

Question from Richard Douthwaite:

JAK now lends according to the ability to repay rather than a variable multiplier according to what a person has saved. Which should be used in the UK?

I think a combination of the two. It is better to lend on the ability to repay and JAK got into problems in managing the "variable multiplier". Taking this away makes the system simpler and more flexible. However I think that it may be necessary to require members to pre-save for a short time before taking a loan to add strength in the initial phase of a UK JAK. This will also help in security of loans and checking people's ability to save.

4.3 The Financial Analysis

“Many members calculate the economic outcome and many come up with different answers. But just looking at the numbers does not always give an accurate picture.”

Magnus Frank, JAK Bank Manager

I have asked that the JAK system be seen with fresh eyes, from outside current thinking around debt, in order to understand whether the principles behind it are good and make sense. However, if wanting to bring the system into existence in the UK then it will be competing within the current lending market and therefore comparisons need to be made on the costs and financial considerations of a JAK loan with a conventional loan.

Below are simple examples to provide a quick demonstration. The interest rates used are the best available sourced from an internet loan comparison site on 01/08/08. It is important to recognise that loan rates vary greatly depending on credit rating and homeowner status etc. and also that rates can vary over time (the examples assume a fixed rate over the loan duration). The calculations for the following comparisons are shown in Appendix 2. Note, the examples do not include any opportunity cost for having to make the 6% Equity Deposit for the JAK loan.

The first obvious comparison, which most people make, is simply for a loan of the same size. For example, for a £10,000, 10 year loan (the average JAK loan size and duration).

Table 3: Payment comparison between JAK loan and conventional loan.

	Total Monthly Payments	Total Cost	Total Paid	Total Savings at End
JAK Loan with no pre-savings	£179.50	£1540	£21540	£10000
Best rate conventional loan (6.6%)	£113.08	£3570	£13570	£0
Best rate conventional loan with poor credit (13.9%)	£149.82	£7978	£17978	£0

With these figures we can see that JAK payments are considerably more, but importantly the costs are significantly less. It is important to differentiate between payments and costs because nearly half of the payments to JAK are for savings that results in £10,000 of savings being available at the end of the loan. So the comparison is complicated by the supplementary savings requirement.

This type of comparison was how I first considered the JAK loan. The fact that costs are so reduced and that large savings are accumulated made the idea a great one to

me. Although I recognised the difficulty in persuading people that JAK is good when the payments need to be larger, I felt that the overall financial benefits were there to see.

The following example is more of a like-for-like with the conventional loan taker also simultaneously saving to achieve £10,000. This makes an immediate difference. JAK are quick to point out the low costs of their loans by using the above type of example but when we include like-for-like savings we can see the effect of the JAK borrower not earning any interest on the savings.

This example negates any effect of inflation because it works on achieving the same level of savings at the end regardless of the purchasing power of those savings.

The savings rate in this example is again taken from an internet comparison site on 01/08/08 and the best rate is used. This is because I am comparing from a consumer's view and using conventional products they would be able to separate the savings and loan between providers. However no single institution could offer such a narrow margin between saving and lending rates.

Table 4: Payment comparison between JAK and conventional loans, including savings.

	Monthly Loan Payment	Monthly Savings Payment	Total Monthly Payment	Total Costs	Total Income	Total Paid	Net Costs Over Duration
JAK	£96.16	£83.33	£179.49	£1540	£0	£21540	£1540
Best loan rate(6.6%) and best savings rate (6.5%)	£113.08	£59.38	£172.46	£3570	£2874	£20696	£696
Best loan rate with poor credit (13.9%) and best savings rate (6.5%)	£149.82	£59.38	£209.20	£7978	£2874	£25104	£5104

In this example we can see that to borrow £10,000 over ten years whilst also saving £10,000 over ten years, the consumer can currently find a solution in the marketplace which costs less than achieving the same using JAK. The consumer's savings effectively earn back the interest that they been paid on the loan. However, for a consumer to get the best rates at all times they would have to move their money several times which would involve a cost in itself. If using a single provider for both saving and loan then the margin between saving and loan rates would be comparable to the fee charged by JAK.

JAK is certainly competitive in the market on this basis. The best rates in the conventional market are usually set as short-term attractors and are very unlikely to

be held for the duration of the loan. A small percentage of consumers are benefiting from the best market rates, but many have no chance of achieving them. **However it is important to note that the JAK model does not automatically provide a financial benefit over what could be achieved with conventional financial products.**

This knowledge came as quite a blow to me during the project. From my initial enthusiasm, my visit to Sweden, and the interest and funding application made by CEU everything was very positive. Making these comparisons, in conjunction with Mark Gater, rocked my strongly held views about the financial benefits of JAK and tempered my enthusiasm. I felt that the task of marketing the JAK product had become that much harder. I could not market it without being completely honest and open about what I know. My enthusiasm for JAK has now returned as the impact of this knowledge has receded and it is viewed from an appropriate perspective. My reaction serves as an example of how initial conditions (my beliefs about JAK) have a great effect on how new information is received.

4.4 Conclusion of Analysis

JAK Members Bank is a viable business and a sustainable business. There is no doubting from my research that JAK has a positive effect on its members and staff.

The workforce is highly motivated to do the best for the members. Most of the staff members, including the senior management who I met, join the company just as a regular job without knowledge of the company. However they quickly become interested and believe in the benefits they are providing leading to high job satisfaction.

The members benefit from being part of a cooperatively owned bank; from access to stable loans not susceptible to fluctuations in the financial markets; from being encouraged to save money rather than pay interest to others; and from being educated and supported about responsible borrowing and money management.

The system has the potential for efficiently directing money towards socially, environmentally and ethically beneficial uses.

But surrounding all these benefits is the real key to the positive effect of JAK – the core values of cooperation, reciprocity and sharing. Through these values the members feel they are part of something good, something they can support and which supports them. Six hundred and fifty of the members volunteer their time and effort to promote JAK and they enjoy doing so. JAK makes money, banking and debt human again.

At a time when the conventional world of finance is becoming ever more abstract from the lives of real people, JAK empowers people by demonstrating the positive nature of

money as a medium of exchange rather than something to be hoarded.¹¹ Anielski calls it, "Genuine Wealth Banking" saying,

"Instead of financial wealth, it is the "real" or "genuine wealth" of the household and community that is being built up."

As our society, economy and finance systems are taking us beyond the limits our world can sustain, we need to use our new understanding of the systems of life to re-frame our society to live authentically and coherently with this understanding. We can make changes in this direction on personal, community, and global scales. With society driven by the economy we need to re-frame its purpose and with the economy driven by finance we need to make changes so that finance too operates coherently with the whole.

JAK Bank shows a different way of dealing with debt. Of course, it is not a complete answer to the problems of global capital markets but in the realm of personal savings and loans it offers a creative solution. Effecting change is not about 'One' solution, it is about small changes on every scale to lead us in the right direction. We have learnt that, in the co-evolution of life and the environment, external perturbations on the environment can lead to explosions in creativity as the new fitness landscape is explored. The financial landscape is now suffering perturbations. The timing is good for new solutions to arise and be tested.

For all these reasons, I wholly support the spreading of knowledge about JAK and the instigation of JAK Banks around the world.

Chapter 5: Starting a JAK in the UK

On my Schumacher application I wrote about my overwhelming feeling that the ‘freight train’ of western civilisation is gobbling up the track far faster than the earth can provide it. Until I came to Schumacher College I didn’t know where to go with this feeling. The whole economy accelerating together in a hopeless direction, what could I do about it? Taking the Holistic Science masters at Schumacher College has helped me understand how we have come to be in the present situation and that small interventions in the right place and at the right time can make a big difference. By directing my own actions in the right way I can open the opportunity for others to change their direction. When I heard about JAK it sounded like the opportunity to do just that. If I could help spread knowledge about it, and lead to a JAK coming into being in the UK, then the benefits could be felt far beyond my own circle of influence.

My analysis of JAK Members Bank in Sweden has reinforced my belief that starting a similar system in the UK would be very worthwhile and could provide far-reaching benefits for many years to come. Over the course of this project I have thought about how this could be done and the important factors to consider. This report is not intended as a finished entity, but is the first steps in an ongoing process. In this chapter I discuss some of the considerations required in the formation of a JAK system with the intention of providing a start from which future work can continue.

The information comes from many discussions, particularly with JAK management in Sweden, Hans Gefvert, and Paula Hatch. However, most of the content is a result of my own subsequent consideration and opinion.

5.1 Growing a JAK

My instinct was that, because of the supplementary savings being a part of the system, the amount of funds available to lend out would keep growing. I thought that some initial capital was needed to help the process to start working quickly, but that once up and running and growing then this initial capital could be repaid, leaving the bank in a strong position to continue to grow. On this basis, a sustainable and socially beneficial bank could be started with little cost to the initial funders. This instinct was backed up in my conversations with JAK management. JAK in Sweden grew very slowly and I wanted to know how to get it established quicker. I am not the sort of person who can start something very small with a 30-year plan for it becoming sustainable. Moreover, I feel that the global issues we face require urgent action.

It was important to analyse the viability of being able to repay the initial loan capital by looking at how money circulates in growing a JAK saving and loan system.

Starting any bank from scratch is a difficult task, having to attract savers and borrowers. With JAK the task is different as it is aimed at people wanting to borrow. There is no financial incentive to attract deposits. In this way it is similar to Credit Unions in this country (described in Ch 5.4), which tend to be small and take a long time to build up.

However the JAK system does ensure a balance between savings and loan. As soon as loans have been issued, savings accumulate in conjunction with the loan being repaid. These savings cannot be withdrawn and so provide liquidity for further loans, again leading to more savings. With initial capital starting the loan process, it will also start the saving process from which new loans can be issued. However the system has to be managed very carefully because when a loan has been fully repaid this makes the supplementary savings available for withdrawal from the system.

Hans Gefvert has done some excellent work in modelling the growth of the system and I am very grateful for his time and effort in sharing his work with me. In my time with him we explored various scenarios of the systems development. Below I will briefly describe some of what I have learned from Hans' models, showing what happens with the initial capital left in the system and the effect once it is taken out.

Like any model, this one is simplistic and needs to be understood as such. The model is designed to help understand the characteristics of the system as money flows in and out, and to do this it is assumed to run with perfect efficiency, with the following conditions being met:

1. 100% of the money that comes into the system as supplementary savings is lent out in new loans during the next time period (month).
2. 100% of supplementary savings will be withdrawn immediately once they become available after repaying the loan.
3. All money is loaned for the same period (36 months).
4. There is £100,000 of initial loan capital, loaned out at £5000 per month over the first 20 months.
5. There are no pre-savings entering the system.

The figures below plot the total value of new loans issued each month over the first 60 years of the system's operation. I start with Figure 5, showing the system without the initial capital being removed.

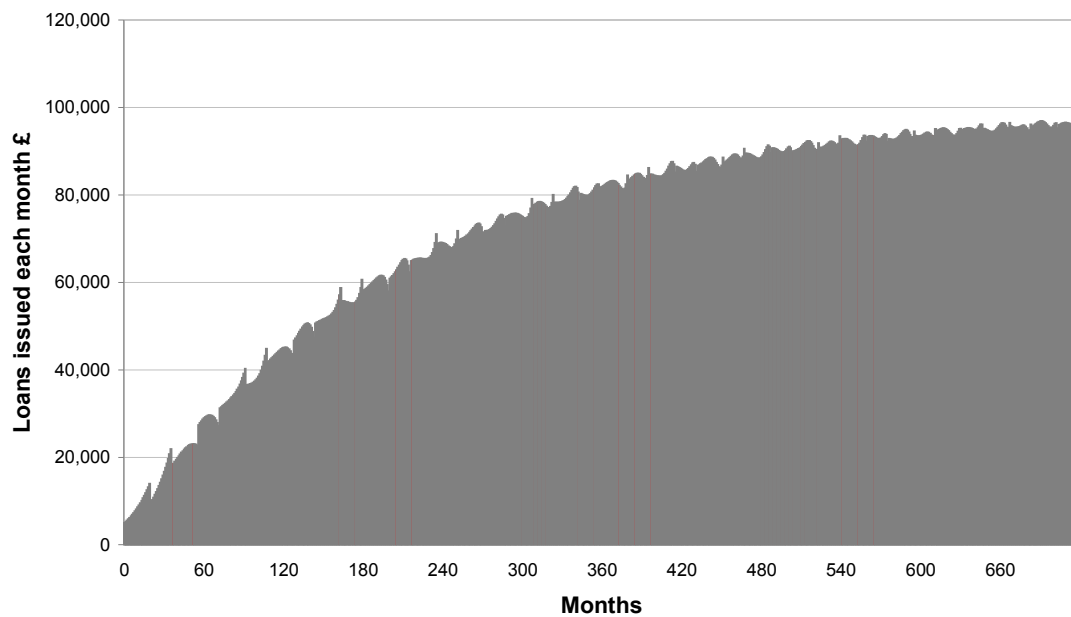
Of course no real system will work exactly like this, but looking at the system in this way was important to me. I wanted to know that the system's success did not depend on there having to be 'extra' money in the system i.e. money that people are willing to keep in the bank interest-free out of support for the bank rather than because they want to make use of the loans. In Sweden people certainly do keep money in the bank out of choice rather than as part of a loan plan, but I cannot assume that this will

happen in the UK. It made a difference to me to think that the system would not be dependent on it.

N.B. The often dramatic fluctuations in the curves shown below are due to cyclical effects of the initial loans being completed and therefore large amounts of supplementary savings being withdrawn, reducing the amount of loans which can be made in the next month.

Figure 5

**Initial loan capital remains in the system throughout
Supplementary savings paid out immediately after loan completed**

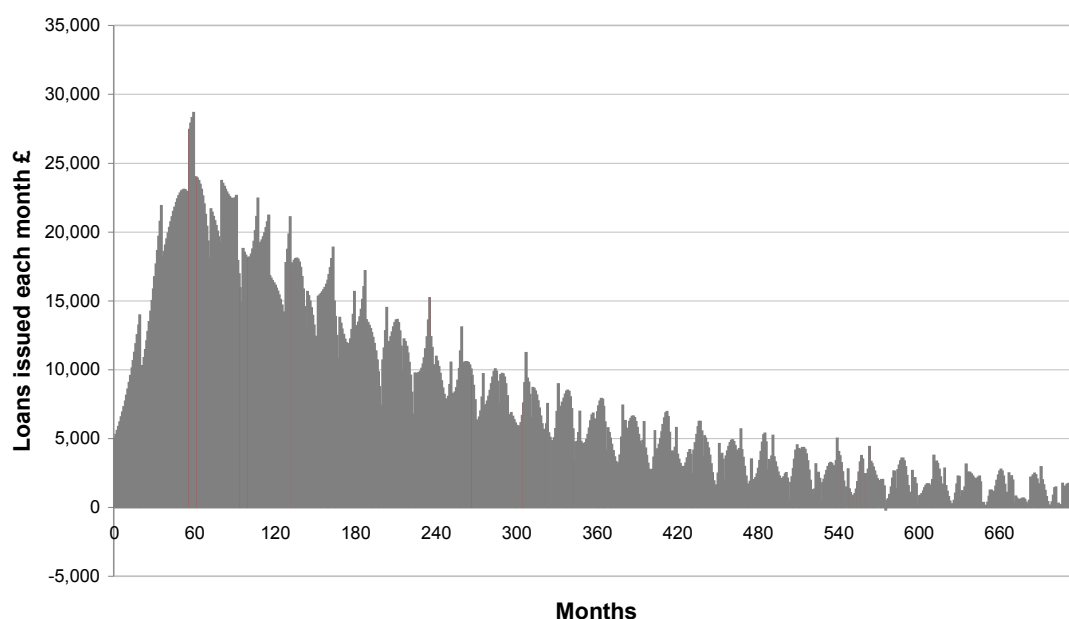


This shows a wonderful natural growth curve. Think of the initial £100,000 as nutrients that can be used to help people by providing them with interest-free loans. As the system develops, these nutrients are recycled more and more efficiently towards a limit where they are all recycled out on loan every single month. This means that money in a JAK system is used with great efficiency in comparison to a conventional loan system.

The next figure shows what happens when those nutrients are removed. Here the £100,000 put into the system over the first 20 months is then taken out and repaid over 20 months, five years after it was put in.

Figure 6

**Initial loan capital returned after 5 years
Supplementary savings paid out immediately after loan completed**



Once the initial capital is removed the system immediately declines, tending over many years towards zero. This demonstrates that, contrary to my and others' instincts, the system cannot be sustainable indefinitely, under the 'perfect' conditions outlined above, without additional inputs of money. However, unlike a conventional loan model that would simply stop if all the loan capital were removed, the nature of the JAK system is such that it is still able to make loans for many years. In only the first ten years, £2,199,543 of interest-free loans are able to be issued.

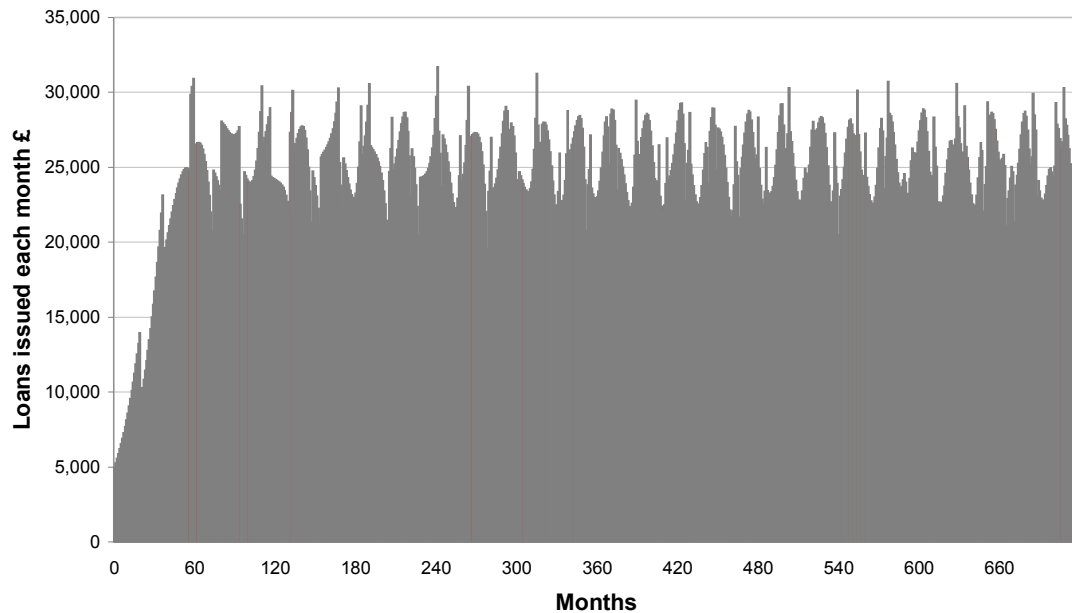
Everything in my research was going well I was extremely enthusiastic about the JAK model. To see the effect on the system once repayment of the initial capital was included, (that a JAK bank could not continue indefinitely if the initial capital is removed without the input of more resources to keep it going) came as a big shock to me. Now that I have had time to think it through, it seems an obvious outcome but looking at the initial capital as nutrients really helps to show how well the system makes use of those nutrients.

It was now clear that, for the system to be sustainable, money has to be put into it in addition to the supplementary savings, which come in as a condition of the loans. It is unreasonable to expect initial loan capital to be provided in perpetuity and so another solution needs to be found. I think that the fairest way is for the existing members, who have benefited from the loan system, to have the responsibility to contribute to the system to ensure its longevity. A simple way to do this is to withhold the supplementary savings beyond the time at which the loan has been fully repaid. The model was adjusted to incorporate this change.

Figure 7 shows the effect of withholding supplementary savings for one month beyond the loan completion. The other conditions still hold and the initial loan capital is removed from the system after 5 years as in Figure 6.

Figure 7

**Initial loan capital returned after 5 years
Supplementary savings paid out 1 month after loan completed**

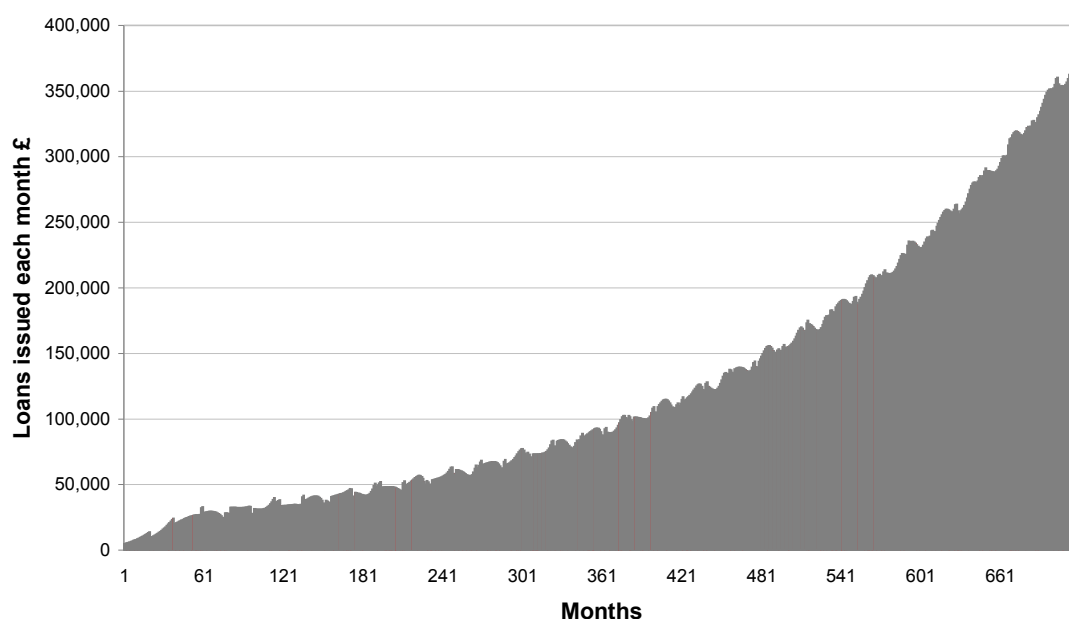


In this case, each member providing the use of their supplementary savings for one month extra stabilises the system once the initial capital has been removed, but does not allow it to grow any further.

Figure 8 shows the effect of withholding the supplementary savings for 2 months beyond completion of the loan repayment.

Figure 8

**Initial loan capital returned after 5 years
Supplementary savings paid out 2 months after loan completed**



The effect is dramatic and the system is able to grow exponentially. **I believe that this contribution of 2 months use of members' supplementary savings is reasonable and should be a condition of taking a loan in the early phase of the bank.** It will help the bank to grow, while also providing additional security to the system. Over time this requirement can be adjusted dependent on the amount of other savings present in the bank.

From adjusting some of the variables in the model other important lessons can be learnt. It is very important to keep the money in circulation. If available money is held in the system, rather than lent immediately, it has a damaging effect on the system's stability. This has wider implications. It means that **there needs to be a continual demand for new loans and so the marketing effort of a new bank will be crucial.** Like any bank, a JAK must have adequate reserves to cover for defaults on loans. As much as possible these **reserves need to be built up out of the bank's income rather than through building a buffer within the loan circulation itself.**

A JAK system can be started on a very small scale but the smaller the start, the longer it will take to grow enough to become a viable business. The model has shown that it is possible to grow a JAK quicker if some capital is found to start the process off. By holding the supplementary savings until slightly after the loans have been paid off, the initial capital can be paid back with the system still able to grow. The larger the amount of initial loan capital that can be sourced, the quicker a JAK system can become a viable autonomous business.

However, relative to the amount of starting capital, the system must grow smoothly and steadily. It cannot be rushed. JAK in Sweden got into trouble by allowing membership to expand too quickly in the early 1990's. With rapid expansion comes an increase in supplementary savings, but if loan demand drops off then, when those large supplementary savings are available for withdrawal, the system becomes vulnerable to fluctuations. It is important to spread whatever initial loan capital there is across many loans and these should be issued over a range of timescales (generally short). This will spread the demand for supplementary saving withdrawal and so smooth the fluctuations, thereby making it easier to control available loan funds. Smaller, shorter-term loans will also make the funds circulate quicker and so the system will grow faster, but without losing stability.

5.2 Appropriate Scale

Naturally following from looking at the growth of a JAK is the issue of an appropriate scale for the bank.

My initial thoughts and feelings about starting a JAK were for it to be a local community bank in the town of Totnes where I live. I am a firm believer in the need for re-localisation and de-centralisation. For the bank to be focused on the Totnes area would ensure that the funds invested would be used locally, helping to benefit the community in the most appropriate ways, and therefore of additional benefit to the members. However I was also keen for JAK to achieve its full potential and so I envisaged a 'distributed network' of small JAKs operating around the country. JAK Totnes would be a forerunner, testing the system, learning about its management, implementation and marketing, from which it could openly share information with people in other areas wishing to start their own system.

A JAK system can work on a very small scale. A small group of friends can run it between themselves. However, with the aim of making JAK a viable, self-supporting business the issue of scale is very important. The loan system itself is easier to manage smoothly with a large amount of members and deposits. For the size of the market in Totnes I believe the bank would always have to forward plan the issuing of loans, making it far less flexible for the members in comparison to a bigger system. **A JAK system only servicing the Totnes locality could not generate enough income to support its own operations.**

It is difficult to define a viable organisation. Some can be run for many years with entirely volunteer help, for example my local credit union described below. However, my own thought about a UK JAK becoming viable is for it to not be dependent on volunteer help. **For me, if the management of the banking operations and administration can be done through paid employment out of the bank's income, the business becomes viable.** JAK in Sweden uses a great deal of voluntary work by the

members to 'market' the bank. This is highly valuable and to be encouraged in any new JAK bank.

A JAK system started on a small scale, without any input of initial loan capital would take many years to grow to a viable level, and in the process require a great deal of voluntary work to maintain it. The input of initial loan capital can give the loan system immediate momentum but it is likely that these funds will only be secured on the basis of a professional business plan being in place which has a strategy to become a viable self-sustaining business.

Following these considerations I think **that a UK based JAK system should pool the resources of members nationwide and be run with one loan system.** However, efforts should be made to keep local identities with local saving and loan statistics. Local aspects should be promoted in communication with members, including schemes for supporting local projects.

I think the best reason to start a JAK scheme on a very small scale would be as a test case to learn more about its operation and how it will work in a British context. To learn about people's feelings from actually using the system would be valuable in educating others.

Local Community Banking

Although my conclusion that a JAK system would be better servicing a large area, there are valid reasons for wanting banking to be done at a local level. This helps keep local money circulating in the community, can direct the money to the needs of the community and allows people to feel a close connection to how their money is being used.

When considering starting a JAK on a very local scale the community perspective came up in discussions, balancing my own perspective of focusing on the JAK model; **a community bank should be set up to meet the needs of the community rather than imposing a specific model such as JAK.¹**

It is a difficult project to create a community-banking organisation of a conventional type. There is a real need to build credibility and trust, which is difficult as many think their money is safest with bigger institutions. The need to explain to people a new way of thinking about lending and borrowing, such as JAK, could make the process more difficult still. A community bank that runs traditional banking activities, which people already understand, and so enable quicker focus onto the community benefits, may attract members more easily. My expectation is that more people would be willing to support a community bank with deposits if they are still being paid interest on their money. This would make it easier to build support and resources for the bank.

This goes against ideological arguments opposing interest. I am not against all charging of interest today because we cannot put a stop to it immediately and there are improvements in the system to be made in many areas. Just like Triodos and Zopa, described in CH 5.4, which have interest charges, I think a true community bank would have, and could show, many benefits over using profit-maximising multinationals. My own personal preference is still for the JAK model as it has wider benefits and nurturing new ways is necessary to achieve the change I feel we need.

5.3 Difference in Context to JAK Sweden

The context of time and place need to be factored into any decisions regarding the starting of the bank.

A major difference between now and when JAK was formed is the advances made in computer technology and the development of the internet. JAK Sweden had no choice but to manage the bank using labour intensive manual bookkeeping. The opportunity now exists to start the bank with fully computerised systems in place to conduct the banking transactions, accounting and financial reporting, and communication with members. An internet banking member interface can allow members to pay into and withdraw from their accounts, follow the activities of the bank and communicate with fellow members. Funding would be required to construct these systems, however they would be highly beneficial in efficiently running the bank. **Therefore, in setting up a UK JAK, fully computerised systems should be used from the outset and so funding should be sought to finance their construction.**

The current economic environment of downturn towards recession, banking crises and contraction of lending, provides opportunities and threats to a new JAK venture. More people are aware of the problems banks are undergoing and are dissatisfied with their profit maximising motives and practices. This provides a good opportunity to educate further about the money system we have, but more importantly, about a responsible attitude to debt and money management. Combined with growing acceptance of environmental problems and increasing demand for ethical business practices, there is an opening for a bank such as JAK to find an audience. However, with people now feeling the effects of the current climate in their reduced spending power, it could become even more difficult to persuade people to take a long-term view required to appreciate the JAK system, rather than the prevailing trend for short-termism. **For these reasons I believe a UK JAK initiative should be targeted at people already engaged in socially, environmentally and ethically beneficial causes.**

There are cultural differences between Sweden and the UK. There is no guarantee that a UK JAK could rely on a powerful network of volunteers to spread information about

the bank in the same way as in Sweden where there is a strong culture of volunteering.² This is likely to be helped by initially targeting members as described above. There is also no guarantee that members in the UK will be willing to leave money in the bank for the benefit of the whole as they do in Sweden. I have addressed this in the 'Growing a JAK' section above. However **research needs to be conducted to test people's feelings about the JAK system.**

Personally I would also like to see a UK JAK that plays no part in money creation to demonstrate that this, as well as not charging interest, is possible. I think that this could be incorporated into the system by separating the pre-savings and supplementary savings. Pre-savings could occur as part of a fixed payment plan for a future loan meaning that there would be no money created in lending them out. Other pre-savings could be used to build the reserves of the bank. However, this will affect the amount of supplementary savings coming into the bank and so the system management would need to factor this in.

5.4 Learning from Other Banking Innovators

When I began this project I knew little about the lending 'marketplace'. I felt it was important to find out what other work was already underway to provide banking in a more sustainable and socially beneficial way. There are several banking and lending methods in operation that are different to conventional mainstream practices. Here I will briefly describe the organisations that are contributing to doing banking in a more sustainable way, and have characteristics relevant to the discussion around starting a JAK Bank in the UK.

Islamic Banking

Islamic Banking is relevant to the debate around financial reform, and particularly interest, because its main purpose is to provide banking services without having any interest charges, forbidden as 'riba' under Islamic law. My research suggests that much of the discussion around Islamic finance is a struggle to find solutions that are sanctioned under Islam while still allowing people and businesses to compete in the westernised global economy. It is good to see economic thinking governed by strict moral laws, but disheartening that there is pressure as a result of western economics to move away from these morals.

The debate about Islamic Banking does not inform the discussion about setting up a JAK other than noting that JAK is sanctioned under Islamic Sharia Law.

Co-operative Ownership: The Co-operative Bank and mutually owned Building Societies

The Co-operative Bank offers a wide range of services similar to the main 'high-street' banks, such as banking services, credit cards, insurance, and investments. The principal difference is in the ownership of the business. Being cooperatively owned means that the focus of the company can be the benefit of its customers who are members of the cooperative, rather than profit maximisation, which is the principal objective of shareholder-owned banks. Not only is the Co-operative Bank committed to, "offering an excellent service to their customers, selling their products in a fair and honest way, and being committed to supporting communities on their doorstep and beyond"³ but is also able to give greater importance to ethical and environmental considerations, and they make active contributions in support of human rights, climate change and ethical investments.

Mutually-owned building societies are also owned by the customers, providing similar benefits.

However the Co-operative Bank and mutually-owned building societies do not challenge the money system in any way. They are creating money out of nothing in the issuing of loans, and they are charging interest on loans and paying interest on deposits. It is difficult for these businesses, even though they are more engaged with the sustainability debate, to deal with their own core activities being part of what is forcing unsustainable growth. However they have the opportunity to try new approaches to finance which deal with the issues of money creation and interest. Of course these solutions would still need to be in the shorter-term interests of their members for them to succeed.

Ethical use of money: Triodos Bank and Ecology Building Society

Triodos is an ethical bank with the mission:

- To help create a society that promotes people's quality of life and that has human dignity at its core.
- To enable individuals, institutions and businesses to use money more consciously in ways that benefit people and the environment, and promote sustainable development.
- To offer our customers sustainable financial products and high quality service.⁴

Its main activity is to direct the use of money to "work for positive social, environmental and cultural change". They do this by attracting deposits and investment which they use to make business loans. Interest is paid on deposits and charged on loans with the difference providing the banks income. They do not issue any personal loans or mortgages. This means that for the individual, Triodos is a bank where they can put their money in the knowledge that it will be directly used for ethical purposes. There is a closer connection between the depositors and where the

money is being used than with general ethical investment funds. This is very powerful in both the effective use of the money, and the depositors feelings of satisfaction.

Ecology Building Society, as well as being mutually-owned, is dedicated “to improving the environment by supporting and promoting ecological building practices and sustainable communities”.⁵ Like Triodos it aims to put money to ethical uses, in this case mainly personal mortgages for sustainable housing purposes.

Both Triodos and Ethical Building Society increase the money supply by creating money through issuing loans. However their success in putting money to ethical uses is extremely valuable. They operate in a highly competitive market place but are succeeding in their aims. Aside from the benefits of the core operations, these organisations also allow people a place to feel good about what their money is doing and therefore is encouraging a more cooperative and together society.

Micro-credit: Grameen Bank and Kiva

“It’s not people who aren’t credit worthy. It’s banks that aren’t people worthy”

Muhammad Yunus, Founder of Grameen Bank⁶

Micro-credit institutions now operate all around the world and the concept continues to expand rapidly. There are nearly 113 million borrowers in Asia alone.⁷ This lending revolution began with the Grameen Bank and its founder, Muhammad Yunus. Yunus’ motivation is the elimination of poverty and he passionately believes that the poor have the creativity and ingenuity to work themselves out of poverty. However, the world’s financial institutions exclude the poor from access to the funds required for them to apply their abilities. Because they have no collateral they are deemed not credit worthy.

The Grameen Bank was formed to provide small loans, on which quite high interest rates are charged to cover costs. The reason for the high rates of interest is because loans are typically over short terms; therefore costs of arranging the loan have to be recouped in a short time. Loans are provided without collateral, without requiring a credit history and without any legal instruments.⁸ This goes completely against standard banking practice, and Grameen Bank also challenges several prevailing economic theories. Yet it has been extraordinarily successful, having loaned a total equivalent to \$6 billion with a current repayment rate of 98.6% (2007).⁹

The key to this success is keeping the borrowing tied to relationships and community; “no one who borrows from Grameen Bank stands alone”. Each borrower belongs to a group of five friends, each member having approved the taking of the loan. The group is therefore taking some level of collective responsibility for the loan. It provides encouragement, emotional support and practical assistance in managing the debt.

By having these loan groups, Grameen Bank has made an incredibly powerful demonstration that we don't need such control and regulation if people are empowered to regulate themselves. A UK JAK can make use of this lesson. It can help reduce loan defaults and operating costs, but most importantly it can benefit the members.

Kiva is an organisation formed to provide an innovative way of funding micro-finance loans. Through an internet site it connects willing lenders with specific micro-loan applicants from around the world. Kiva is a not-for-profit organisation and itself requires donations to fund its work. However, it has some exciting features.

No interest is paid to the lenders. **Therefore it shows that people are willing to lend without expecting a financial return for their investment.** The amounts loaned are usually small but, with a global market, significant amounts can be attracted. The users are attracted by knowing exactly who is getting the use of their money, and for what purpose.

Kiva offers a powerful alternative to charity donations. When an individual makes a donation to charity the money is gone, hopefully to be spent well. With Kiva the individuals know that the money is being used well, directly helping someone lift themselves out of poverty. But more than that, the money is paid back and the individual can loan it again. The money can be continuously recycled, helping people over and over again.

Direct Lending: Zopa

Zopa is an internet based marketplace for direct lending, "people lend and borrow money with each other, sidestepping the banks".¹⁰ By enabling direct lending, Zopa is not part of the money creation system, however that is not its motivation. It is a for-profit company, funded by venture capital, founded by experienced former executives from one of the UK's largest internet banks. The observation was made that corporate access to capital is efficiently provided through the flexible market mechanism of the bond market. The opportunity was seen to provide a similar flexible marketplace for individuals to access capital. The internet has provided the opening to create this marketplace.

Lenders can survey all the loan requests on the Zopa website with information about the borrower, the purpose of the loan and the borrowers credit rating. They can then choose who they wish to loan to, how much they would like to lend and stipulate what interest return they would like. When lenders have pledged the total amount of the requested loan the borrower is offered the loan and given the combined interest rate. They can then choose whether to accept. If an excess amount is offered by lenders the loan offer is made up of those requesting the lowest interest rate return. The market therefore determines the resultant interest rate on loans.

Zopa charge borrowers a fixed fee of £94.25 and lenders a 1% annual service fee on all money lent out. They use external companies to identity check all members, credit check and risk assess borrowers and chase missed payments.

Through bypassing the banks, borrowers can get loans at a lower rate and lenders can achieve a higher return. Both sets benefit, although it is still following the predominant way of those with money being paid some more by those who need it. However the result is that money is made more human again. Instead of people having money sitting in a bank it can be lent to real people. It keeps people involved in how their savings are being used.

It is exciting to see how Zopa is using the internet to by-pass the banks and provide benefits to its users as a result. I believe this kind of system has great potential for incorporating lending for ethical purposes. It would be interesting to know what the market rates of interest would be for socially and environmentally beneficial loans. I would hope that they would be very low.

Zopa does not have to meet the strict legal and financial requirements of banks. This is because they do not accept deposits themselves. They only act as an intermediary; a separate bank deals with all actual money transfers. This was an important success for Zopa as the financial requirements for banks can make it prohibitive for small companies to enter the market. Enquiries need to be made to see if a UK JAK could operate in the same way.

Credit Unions: Devonlane Credit Union

Credit Unions came into being in the 19th century out of a desire to develop a system of co-operative credit. The movement is much bigger in North America and Ireland but there are over 400 credit unions in the UK serving over 400,000 members.¹¹ They are all co-operatively owned and controlled by the members. They are used primarily to provide affordable financial services to people excluded from mainstream banking, and they work to improve the financial literacy of the members. Interest charged on loans is typically 1% per month (12.68% APR), which is used to cover costs. No interest is paid on savings, but dividends can be paid to members if excess income is accumulated.

Devonlane is my local credit union and is typical in that it is quite small with a few hundred members and is admirably run entirely by volunteers managing the system manually on paper. This shows the difficulty in being a small local financial organisation. It is very difficult to achieve a critical mass where resources are big enough to take on a paid employee and therefore have the input required to grow the organisation further.

The philosophy is close to JAK in that it is about a community pooling its savings and making low cost loans to those in need. It provides a significant benefit to those who's

only other access to finance is through doorstep lenders with much higher charges. Members have to save first and, after thirteen weeks of regular saving, they can then borrow up to twice the amount of their savings. When the loan is taken the savings must be left in the credit union, and so half the loan is effectively borrowing the member's own savings. Subsequent loans can be for up to three times a member's savings.

Credit Unions provide a valuable service, helping to keep money circulating locally and addressing financial exclusion. However they have struggled to make an impact on the mainstream.

Key lessons for Starting a JAK

- Many people want their savings to be put to better use for society.
- If it is put to good use, there are people willing to offer their money without expecting a financial return.
- There is a demand for a more human way of dealing with money.
- Individuals and society benefit from co-operative organisations.
- The internet provides a great opportunity for bringing people together.
- Funding is needed to help achieve a critical mass where further growth can be self-sustained.

5.5 Options for Starting a JAK

Within an Existing Organisation

A JAK system could be started from within an existing organisation as an option to customers alongside existing offerings. The ideal organisations to do this would be the Co-operative Bank, or mutually owned building societies as described above. These are already owned by the members and as a result have a tendency towards sustainable considerations. By launching a JAK in this way, it may be more difficult to maintain the desired ideological stance, and the focus on tracking local benefits, but the payback in getting the system running would be great. The JAK would start as a very small part of the organisation with small operating costs and so these organisations have the financial strength to launch the system at a meaningful size. JAK could be a good way for them to test how savings and loans can be part of a more sustainable future. It could also help improve the ethical credentials of the organisation as a whole (something becoming increasingly important in the business world) by being marketed towards these areas and also by directing the purpose of the loans towards socially and environmentally beneficial uses. For example it could even be a specific part of the organisation with the aim of helping the financially excluded.

I don't assume that this is a straightforward decision for an existing organisation to make. For an organisation immersed within the mainstream lending environment to

accept the need for different ways and to embrace the JAK system would require quite a shift in mindset. However, from my research, I believe that this shift is beginning to happen.

As a Method of Credit Offered by Retailers

Another way for JAK to enter the UK marketplace is as a finance option offered by a retailer to its customers. For example, solar panel retailers could offer a JAK loan as a way of financing the purchase. The loan would be interest-free and the savings in energy costs would help finance the supplementary savings requirement, to be returned to the customer on completion of the loan repayment. This could be a useful strategy to help alleviate the increasing numbers suffering in energy poverty.

Starting a New, Autonomous JAK Bank

I think the internet provides a great opportunity for a nationwide JAK Bank, and it could be launched with a primarily internet based interface, similar to Zopa as described above. With the internet now widely available, it is a powerful marketing tool for businesses and also allows members the chance to manage their accounts online, keeping the overheads of the bank low. However, care would need to be taken to ensure smooth rather than erratic growth, and efforts should be made to have real interactions in the bank, not only virtual ones. Establishing the member network would be important in building members' connection to each other and the bank.

In this scenario, significant start-up funding is required to finance the development of the secure computer systems and internet site, the legal work involved in forming the bank, marketing the concept and the initial running costs until break-even. This is as well as initial loan capital to start the system itself.

Further considerations below are my opinions based on this option of launching an autonomous, nationwide JAK Bank.

5.6 Funding

My idea that some people would be willing to put money into a JAK for a set period of time, without expecting a return, to help get a JAK system going has been reinforced during this project. I have already received offers from several individuals willing to do just that, as well as receiving general support for the idea.

I was also inspired to find that Muhammad Yunus, in his recent book, *Creating a World Without Poverty*, shared on a wider scale my belief that there is great potential for socially beneficial start-up businesses to be funded in this way. Yunus makes the argument that we need to readjust capitalism away from the not-fully human behaviour of profit maximisation to a model that embraces the creative capabilities of

business but directs them towards the good of society. The reason for being a social business is to deal with a social problem, not to maximise profit. Investors in these businesses would get their money back but no dividend. Why would investors put money in on these terms? Yunus explains,

“Generally speaking, people will invest in a social business for the same kind of personal satisfaction that they get from philanthropy. The satisfaction may be even greater, since the company they have created will continue to work for the intended social benefit for more and more people without ever stopping.”¹²

I believe that a UK JAK, as I envisage it, is a social business. It can be directed towards helping the financially excluded, it can help in the move towards environmental sustainability and financial sustainability. **I believe the social climate is right for attracting funding for starting a social business like JAK.**

5.7 Technical Considerations

Constitution

A new bank will need a strong set of rules and principles along the following lines:

- The bank should be member owned and run for the benefit of the members with the explicit recognition that intrinsic to the members benefit is wider environmental and social well-being.
- Participation open to all.
- Egalitarian and democratic principles to be adopted.
- Honest and open communication with members.
- The bank itself should use a bank with strong ethical principles, which is furthering environmental and social causes.
- It should actively promote and educate about sustainability and encourage discussion about the financial system.

Legal

The legal structure of the bank will be very important and the regulatory frameworks in the financial services are complex. A successful application to Friends Provident by CEU would provide the necessary work to conclude how a JAK Bank could best fit into this framework.

The bank will need its own legal and banking expertise on the board to ensure legal governance requirements are met, and also to create strong contracts and terms and conditions for the bank's operations.

System Management

Risk Management

In discussion with a conventional bank manager about this project the overwhelming topic of questions were regarding how to deal with security, loan defaults, credit scoring, credit control and money laundering. These are critical to the success of the bank.

I think a UK JAK needs strong policies on credit control. The emphasis should be on minimising loan defaults by making sure that loans are issued responsibly in discussion with the member and that there is support for members in the repayment process. Strong member commitment can be gained by the bank's communication with members and member circles could be used in a similar way to Grameen Bank. However, if payments are missed it jeopardises the bank's future and therefore the benefits to all its members.

From these strong policies I then think the work itself should be sub-contracted to experts in the field in a similar way to how Zopa does. This enables the bank's management to concentrate on the core activities and keeps the operations small. The costs of outsourcing these services should be paid for by the loan fees. Outsourced work should of course be coherent with the bank's ethical policy.

Computer Systems

The bank management system needs to be built up from three separate systems; the banking system with accounts, loans, payment plans etc, an accounting system for financial reporting, budgets, and salaries etc and a member contact management system which can send out mailings, reminders, statements etc.

The accounting system need only be an inexpensive standard package, but should have an Application Program Interface (API) so that it can import information from the banking system. Contact management systems are widely available. The banking system may need a bespoke design in order to incorporate the supplementary savings requirements and saving points into the system.

These three systems are used by the bank but linked to them is the bank's website providing secure log in and internet banking services. This will take information from the banking and member systems. The internet banking can be kept simple by allowing each member to transfer money out of the system to only one pre-arranged and verified account. This will also lessen chances for fraud.

The systems must be backed up at the end of each day.

Managing the system in this way means that the bank will not be receiving money itself. Transactions in the JAK system will be fed through to the company's own bank where the money transfers actually take place.

This is a digital system with no cash transactions. It may be necessary to accept cash deposits, preferably on a local level, for people who do not have access to computers, or who don't have a conventional bank account.

Marketing

The marketing and educational challenge is great, and is different to marketing a 'normal' business. For people to take to the idea it will require an understanding of how it works and also a shift in thinking towards a far-sighted view. To achieve this involves a softer and lengthier approach. Yvonne Gustafsson says, "over a cup of coffee is the best and to give personal experience that it works. Then they can think about it, come back and ask more". This shows the importance of developing the member networks.

Yvonne goes on to advise on ways to initially attract members, "Talking, writing in papers, visit groups, first groups who have the same idea about the Earth. They are halfway but just haven't seen the connection to economics". A particularly good opportunity to do this is through the Transition Network.¹³ This is not a single cause initiative, but advocates a transition in our way of life towards a desirable, sustainable future that we create ourselves. I think a JAK Bank fits well with this initiative. The Transition Network is also well developed in some areas, growing in others and emerging in yet more. This dynamic could be very beneficial to smoothly spreading information about a JAK Bank within a network of interested people, at the same time creating a bank which can support the Network's causes.

The marketing must be professional and add to the credibility of the bank. It should target members wishing to borrow, and also members willing to put part of their savings into the bank in support of its operation.

5.8 Summary

I believe a UK JAK should operate nationwide, either as part of an existing financial cooperative or as a new internet based company. It should initially look to attract people with a leaning towards environmental and ethical considerations. The blossoming Transition Network provides a good opportunity to do this.

To start an autonomous JAK, trust and credibility need to be developed. Support is required from people with banking and legal experience. Funding is necessary to build the management systems and market the company as a professional operation.

CONCLUSION

“Design as a large concept means, in Wendell Berry’s felicitous words, “solving for pattern,” creating solutions that solve many problems”

David Orr¹

Modern science informs us that the human species has the same origins as every other species. We are inextricably connected to the rest of life on this planet through the history of time and the space of our planetary home.

We have unique abilities to alter the planet ourselves, but we are utterly dependent on the rest of the web of life, from bacteria in our stomachs, to single-celled algae in the oceans to the trees of the world’s rainforest. All are intricately linked within local ecosystems but we now know from Gaia Theory that the entire complex global system, of life on this planet, together maintains the physical characteristics of the system in conditions suitable for life to continue.

Deeply accepting this knowledge so that it is held, not just intellectually, but within our feelings, senses and intuitions, removes the possibility of seeing ourselves as superior to the rest of life and with dominion over nature, as proposed during the history of western religion and science.

To me, the new scientific knowledge lends rationality to moral wisdom which has been taught throughout the ages.

Regardless of the current environmental situation, it is in our interests to act as a coherent part of the web of life. However, the flawed mechanistic worldview which has dominated thinking since the beginning of the scientific revolution in the 16th century, has led to the critical state of the environmental crisis. The need for change is now most urgent. We are not stuck with the way things are. They have not always been this way. We created systems out of our belief in what we can now recognise as a flawed worldview. We have the ability to change those systems.

Central to the problems we face, of unsustainability, inequality and community breakdown, is the economic system we have created and the behaviour it nurtures. And central to the economy is the money system used to keep it flowing. We create wealth through business producing economic output, but the money we have (97.2% of it) to pay for the economic output has been created as interest-bearing debt. This results in a constant struggle to keep economic output growing so that the debt can be serviced, but to achieve this, more debt has to be issued. The real need for growth is not because we need more production and services but because the system we have created requires it. Added to this, it systematically transfers money from the poor to

the rich, increasing inequality and division in society, and through perpetual scarcity of money, fosters aggressive competitive behaviour.

In economics there is a critical need to re-define wealth from a holistic viewpoint, encompassing coherence with our place in the world, ecological limits, and our values for the society we wish to create. We can then form business models tailored to creating this wealth.

New models for the banking industry are particularly important, as the actual reason for their core operations is the expansion of the debt-money system in order to maximise profits. While there is a need for higher level reform of the money system, innovative banking methods are potent catalysts in changing our thinking about money and how it is used.

I strongly believe that the JAK model, described in detail in this report, is a model consistent with a holistic definition of wealth. I believe it can lead to benefits on many levels, and I believe the timing is good for a JAK system to be started in the UK. The model operates in Sweden, and it works.

A new JAK Bank should aim to maximise its benefits to society. It has the potential to help alleviate financial exclusion, fund environmental projects, educate about the problems of our economy, financial system and interest, and encourage behaviour change towards greater equality and increasing cooperation. It can do all of these things besides its core activity of running a saving and loan system without any need for interest charges.

The influence of our culture is ongoing and reinforcing, providing big challenges to initiatives trying to do things differently. But continuing to do things the same is not a good option. As the environmental crises, energy supply problems and economic and banking troubles act as interlinked perturbations on the complex system of our culture, the opportunity arises for new creations to demonstrate ways of evolving beyond these human-made threats to ourselves and the rest of life.

For myself, the journey through this project has been undulating. I feel very enthusiastic about the potential for a JAK. I hope that the project can continue and a JAK Bank in the UK becomes a reality. At times my enthusiasm for JAK has been knocked by certain realisations and it has taken time for it to recover, but it hasn't recovered just because I wanted it to, or just because I was doing this project. It returned out of my continued and honest analysis.

I have learnt a lot through the process of this project and enjoyed it. At times it felt difficult to concentrate on such a specific topic when we have covered so much ground in the Holistic Science course. A JAK Bank is so small when compared with the magnitude of the challenges we face in becoming sustainable and authentic as part of the world. However it can be something that helps people, it can help support and join

with other solutions, it can spread, and it can lead to new solutions being developed and implemented. Or it might not succeed and so die. This is the nature of things in an evolving complex adaptive system. From my analysis, it is certainly worth giving it a shot.

I know that starting a JAK is difficult and requires support. I hope that readers of this report will feel as I do about its potential and I would be grateful to know if you do.

NOTES & REFERENCES

Title Page

1. Schumacher, 1974. I put this quote in my application to Schumacher College, as a summation of my feelings; that the Earth provides all that we need, but we try and take much more.
2. Lietaer, 2001

Abstract

1. New Economics Foundation, 2006, available from www.neweconomics.org

Introduction

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Part 1

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Chapter 1

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24. Public lecture given by Nic Marks from the New Economics Foundation, June 2007.
25. Haidt, 2006
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Chapter 2

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3. The goldsmith's story is one I have read and seen several times as an explanation for the origin of fractional reserve banking. I reproduce it here as a simplified story about how this kind of practice developed.
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5. Greco, 2001 and Bank of England website, August 2008
6. Rowbotham, 1998, explains that the legal 'reserve requirement', the ratio of reserves to loans that legally have to be maintained, has been abandoned. There is now an international agreement for a 10% 'capital adequacy' ratio. However under this arrangement the reserves do not have to be held in cash. The reserves are themselves made up out of the bank credit money supply and are built up "by creaming off some of the interest they charged to borrowers". Rowbotham goes on to say, "The requirement to build up these '10% reserves' affords no control over the process of money creation, nor any protection to the public; quite the reverse."
7. Casu et al, 2006
8. A currency backed by gold is not necessarily a good idea. It encourages digging up as much as possible and is therefore damaging to the planet. However, under a gold standard, money was a debt which could be redeemed for a physical commodity. Without a gold standard money is just a debt.
9. Zarlenga, 2000
10. Schumacher, 1974
11. Lietaer is a true expert on money. As a senior central bank executive in Belgium he was closely involved in designing the European currency which became the Euro. He was identified by Business Week as the world's top currency trader while General Manager of the most successful offshore currency fund. He worked for 12 years as a consultant to multi-national businesses around the world and advised developing countries about how to optimise earnings from currency. (Information from Lietaer, 2001)
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14. The most commonly referred to study of interest-caused wealth transfer was conducted by Margrit Kennedy, author of *Inflation and Interest-Free Money*, 1995. Her study, performed in Germany in 1982, split the population into ten income groups, each of about 2.5 million households, and calculated the 'Net Interest Transfers' of each group. The study highlighted the net effect that the bottom 80% of the income earners transferred DM 34.2 billion to the highest earning 10% in that one year. The second highest earning group received net interest of about DM 2.5 billion.
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16. Margrit Kennedy says that interest also causes inflation. I have chosen not to complicate this chapter with the complex discussion about inflation because it is not so relevant to Part 2. However it is worth noting that, as interest charges are passed through the economy, Kennedy states that we pay about 50% capital costs in the price of our goods and services.

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Conclusion

1. Orr, The Designer's Challenge, essay published at:
http://www.ecoliteracy.org/publications/david_orr_challenge.html

APPENDICES

- Appendix 1** **CEU Concept Paper for Funding Application to Friends Provident Foundation.**
- CEU Briefing Note on JAK for Friends Provident Foundation.**
- Appendix 2** **Calculations for payment comparison between JAK loan and conventional loan.**



Concept note: Researching the transferability of the JAK Bank to the UK

Introduction

Community Enterprise Unit (CEU) Ltd is a social enterprise based in Exeter, Devon which works across the South West and beyond. CEU has been delivering high quality support to the voluntary, community and social enterprise sector for more than 9 years, including considerable experience of working with the community finance sector.

Our project

Earlier this year we were approached by an individual (Mark Burton) who asked if we were able to assist his plans for developing a UK version of the JAK Bank. The JAK bank is a co-operative member owned Swedish Bank which does not pay or charge interest to its members. We met with Mark to discuss his ideas and a number of questions emerged which needed to be addressed. None of our existing projects or funding streams enabled us to undertake this piece of work with Mark, hence this proposal. We would like to undertake a research project which will fully and rigorously explore the potential of a developing a JAK bank in the UK. In particular we would like to explore the following issues:

- ❖ Establish where a UK JAK bank would fit within the current UK banking and community finance legislation and the implications for the business model
- ❖ The views of key UK stakeholders on the potential and role of a JAK bank in the UK, with particular reference to addressing financial exclusion
- ❖ Research the experience of those who have tried to transfer the JAK model to other countries
- ❖ Review existing research literature on JAK

Mark is currently completing a Masters degree at Schumacher College and is passionate about pursuing this project. He has already visited and had discussions with JAK, and also has support of key figures such as the economist Richard Douthwaite. We would like to support him with this process by producing a piece of balanced, robust research which enables him to make informed decisions about how and whether to take this project forward, and which will inform wider debates about the possibility of developing non-usurious banking models in the UK.¹

Our request for funding is primarily to fund our time to address the research issues detailed above. We would envisage using a mixture of methods: face-to-face interviews, telephone interviews, literature reviews and perhaps focus groups / seminars. We would aim to produce a document which could be disseminated widely for those who are interested. At this point we have estimated a budget of £25,000 for this project as we anticipate a certain level of detailed work will be required.

How this project addresses the Friends Provident Foundation priorities

Clearly, the development of an interest free bank could have an important role to play in developing low cost financial services. The effective interest rate for JAK members is around 2.5%.

In terms of the priorities of the Friends Provident Foundation we believe this piece of work would address the following priorities:

¹ As far as we are aware the only interest free banking in the UK at the moment is undertaken within the Islamic banking sector.

Information: This project will provide a detailed research report the possibility of setting up a new type of non-usurious bank within the UK which has a proven track record and business model within Sweden. The report will also help to publicise this unique model within the UK

Innovation: The idea of 'importing' the JAK model to the UK is itself an innovative idea as is the idea of developing non-usurious banking within the UK.

Infrastructure: The research is supporting plans for the development of a new type of financial institution within the UK.

Influence: The purpose of the research is to enable Mark to proceed with the development of a JAK UK in an informed way. The research will enable him to convince backers and partners that he has explored the relevant issues. By publicising JAK and its critique of debt based lending it may stimulate further debate on the UK banking system which is highly topical in view of the ongoing 'credit crunch'.

Our suitability to do this work

This piece of work would be led by Debbie Stewart. Debbie is a founding Director of CEU and has many years of experience working within the community finance sector. She is a Director of the Wessex Reinvestment Trust (a Community Development Finance Initiative) and is currently Acting Executive Director whilst they recruit a new member of staff. She would be assisted by other members of CEU staff including Steve Angove who is a former bank manager and holds a Masters in Social Research and Noel Longhurst who has community finance experience and is currently working on a PhD with the University of Liverpool. CEU is well respected and has connections with a number of key thinkers and institutions within the field of community based finance who would be approached to participate in this exciting project.

The JAK Members Bank – Briefing note for Friends Provident Foundation

The JAK Members Bank is a fully authorised and regulated bank operating nationwide from a single office in Skovde, Sweden. It has existed in its current form since 1967 but has its roots in the Denmark where it was first developed as a response to the Great Depression. It is a co-operative interest free bank which differs from conventional banks in several ways:

- JAK pays no interest on members' savings and charges no interest on loans. The operating costs of the bank are met through charging a small membership fee and an administration fee for each loan.
- It is owned by its 36,000 members and is run for their benefit.
- All its marketing is done through a network of 380 member volunteers passionate about the bank and its benefits. These volunteers organise events, training courses and discussions centred around economics, and they offer support to other local members.
- JAK has no branches and all transactions are conducted by post or telephone.
- JAK has a very low default rate as borrowers are committed members rather than unattached customers.

As an organisation JAK has both an ideological and practical purpose. Firstly, it intends to encourage debate on the ill effects of interest and promote awareness of alternative approaches. Practically, it administers interest free savings and loans with the objective of showing that such systems can be viable and can release people from the trap created by onerous rates of interest, and the wider problems of economic and social instability caused by interest based banking.

How it works

JAK is effectively a co-operative which enable people to pool their savings and then offer interest free loans to members. The procedures for the issuing of loans is described in detail in Anielski (2003).² In brief, the process can be described as follows:

- Members are normally required to save for a period before they are able to apply for their first loan. Whilst saving they accrue *savings points* which give them the right to borrow without interest.
- The decision to grant a loan is based on a number of factors including a member's *pre-savings* and the liquidity in the overall system.
- When a loan is granted the borrower is committed to regular repayments of the principal amortized over the loan period. They are normally also required to continue saving to balance the *savings points* 'consumed' by the loan. This means that at the end of the loan period they will have accrued savings equal to the amount that they have borrowed.
- A *Loan Fee* is charged instead of interest to cover the costs of administration. Anielski (2003) calculates that over a 38 year period this has fallen within the range of 2.03% (for a thirty year loan) and 4.91% (for a two year loan) if considered as an "effective interest rate". The average "effective" rate of interest is 2.5%.
- In addition, borrowers pay a refundable equity deposit of 6% of the value of the loan. This 6% provides the bank with capital to protect against loan defaults, and so the member accepts that there is a risk that they won't get this money back. However JAK have never had to use these reserves.
- Members pay a small annual membership fee which goes towards the banks equity.

² Anielski (2003) can be downloaded from <http://www.anielski.com/Documents/The%20JAK%20Bank%20Report.pdf>
It is worth noting that some of the specific processes described in this report have since evolved but the overall principles and approach remain the same.

In 2008 JAK reports that its members have saved a total of €97 million and have borrowed €86 million.³

Why introduce the JAK system to the UK?

The JAK bank is an ideological and practical challenge to many of the conventional approaches to personal and business finance. It raises questions about the relationship between people and debt and offers a different approach which is proven to work. These are highly topical and relevant questions. In recent years personal borrowing has increased dramatically and the effects of the global credit crisis this year have highlighted people's dependence on debt. It has become part of our culture to borrow as much as we can now without due consideration for the future effects, often resulting in an increasing future debt burden. The JAK system promotes a more responsible attitude to borrowing. It starts from a position of how much a member is able to save and only allows a loan amount in relation to that, while also ensuring savings can be built up which develops future financial security. The bank is not subject to changes in the financial markets and fluctuations in interest rates, and members will have fixed payment plans for the life of their loan.

Arguably we are at a point in time where we need cultural change which promotes togetherness and cooperation rather than individualism and self-interest. The pursuit of self-interest is especially evident in the financial markets. However this behaviour has widespread negative consequences on society. We instinctively know that cooperation and sharing are good. This is how the JAK Bank works and these non-financial cultural aspects are seen by the members as one of its greatest benefits and strengths. As such, JAK provides a model of community focused bank. The banking world has changed dramatically over recent decades where the number of banks has reduced and the ones that remain are large organisations that are distant from local communities. A UK JAK Bank would provide a different model to the conventional approach to banking and would therefore promote discussion and debate about how our financial system should work and for whose benefit. It would show how banks can play a meaningful role in the community, keep money circulating locally and provide ongoing financial education to members.

What benefits could it bring to financially excluded people in the UK?

In the context of the ongoing global 'credit crunch' we believe this piece of research would raise important questions about lending models and access to finance. We would hope that the research could be used to stimulate debate about alternative approaches such as that offered by JAK. This itself may contribute to the wider ongoing discussions around legislative reform of the banking, the financial infrastructure and the ways in which consumer debt is promoted and managed. At this level, the piece of work contributes to public discourses about our attitudes and relationships to money and debt.

On a practical level we believe that the JAK model can provide an alternative to the high interest loans which many financially excluded people have to resort to. As mentioned above, the effective interest rate for borrowers is 2.5%. As our concept note explained, a central aspect of this piece of work would be to thoroughly research the extent to which a JAK bank *could* address issues of financial exclusion, and where it would 'fit' in relation to other existing institutions such as credit unions and other forms of microfinance. In doing this we would look not only at how JAK operates in Sweden, but we would also examine the other JAK inspired initiatives in India and New Zealand which have replicated the model and which are motivated principally by the desire to address financial exclusion. We would therefore hope to establish where a UK JAK would fit within current UK legislation, how it would relate to other financial institutions and the extent to which it might provide a service to those which are most vulnerable to financial exclusion.

³ See <http://jak.se/>

Appendix 2

JAK Payments for £10,000 loan to include £10,000 supplementary Savings		
Loan Amount	A	10000
Loan Duration months	M	120
Loan Duration years	Y	10
Loan fee fixed element % (see p42)	F	1.3
Total loan fee	TF = $A \times F \times Y$	1300
Monthly payment by borrower		
Loan repayment	LR = A / M	83.33
Loan fee	L = TF / M	10.83
Monthly member fee (approximation)	S	2.00
Monthly Loan Payment	mLP = $LR + L + S$	96.16
Monthly Savings Payment	mSP = A / M	83.33
Total Monthly Payment	mP = $mLP + mSP$	179.50
Total Costs	C = $(L + S) \times M$	1540
Total Income	I	0
Total Paid	= $mP \times M$	21540
Net Costs over Duration	= $C - I$	1540

Payments for Conventional £10,000 loan and £10,000 savings		
Loan Amount	A	10000
Loan Duration months	M	120
Loan Duration years	Y	10
Best available savings rate % APR		6.5
Best available loan rate, good credit rating % APR		6.6
Best available loan rate, poor credit rating % APR		13.9
Calculations for good credit rating		
Monthly Loan Payment (from online loan calculator @ 6.6%)	mLP	113.08
Monthly Savings Payment (from online savings calculator @ 6.5%)	mSP	59.38
Total Monthly Payment	mP = $mLP + mSP$	172.46
Total Costs	C = $(mLP \times M) - A$	3570
Total Income	I = $A - (mSP \times M)$	2874
Total Paid	= $mP \times M$	20696
Net Costs over Duration	= $C - I$	696
Calculations for poor credit rating		
Monthly Loan Payment (from online loan calculator @ 13.9%)	mLP	149.82
Monthly Savings Payment (from online savings calculator @ 6.5%)	mSP	59.38
Total Monthly Payment	mP	209.20
Total Costs	C = $(mLP \times M) - A$	7978
Total Income	I = $A - (mSP \times M)$	2874
Total Paid	= $mP \times M$	25104
Net Costs over Duration	= $C - I$	5104



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