



Richard Olsen
**Global Economy under Siege –
Possible Initiatives**

Global Economy under Siege – Possible Initiatives

The global crisis has fueled a debate of how the functioning of the economy needs to be changed. Commentators have focused on regulatory reform and on the need to restrict compensation packages for bankers. The debate has failed to address wider and more fundamental issues. In the following article I provide a brief overview of initiatives for the changes that I propose. I have developed these ideas over the last thirtyfive years. The proposals to reform the financial markets are based on my work in high frequency finance and my hands-on experience in building two businesses active in financial markets. One of them is OANDA, an Internet market maker for foreign exchange, and the other is Olsen Ltd, a quantitative asset manager. These companies provide me with hands-on experience of how to implement my approach in hands-on business and inspiration based on my practical experiences, of how to evolve my ideas. The other proposals are inspired by my system theory, which is the theoretical foundation of my work in high frequency finance, and by the insights gained from studying law. My work in high frequency finance has resulted in a book that I published together with my colleagues called 'Introduction to High Frequency Finance' by Michel M. Dacorogna, Ramazan Gençay, Ulrich Müller, Richard Olsen, Olivier Pictet, 2001 Academic Press as well as a number of research papers. I also publish a blog at www.olsen.ch.

The evolution of society has not been continuous. Radical innovations have transformed our society. Democracy, for example, is a relatively recent innovation, which, even today, a few countries do without. Before the French Revolution it was inconceivable that the European countries could be democratic; within only a few years, however, the perception changed. Some of the initiatives may sound utopian, but as I will argue in future blogs, there are social forces at work that propel the initiatives.

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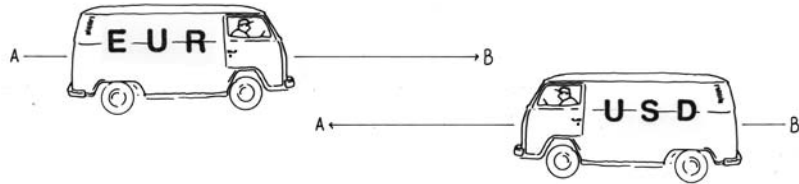
First Edition

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Digitize the financial markets

The financial markets are computerized and banks operate huge computer networks to process the daily load of transactions. Computer systems hide the fact that the underlying business processes are outdated. They were defined at a time when only traditional postal services with overnight delivery existed;



this is why even today international payments take two days and interest rate payments are made in discrete intervals of a minimum of one business day.

In traditional mechanics we experience how minor defects cause big repercussions. The same is true with financial markets, where minor operational deficiencies can have a major impact. We can improve the operational efficiency of the financial markets thereby reducing uncertainty by digitizing financial markets and settling financial transactions in real time with second by second interest rate payments and by introducing digital financial contracts, where the full contract content is computer readable and not in the form of 200-paged contracts in lawyer speak with Excel spreadsheets. Such a development will reduce volatility in the financial markets and lower the likelihood of systemic risk.

For the record, OANDA proves the feasibility of operating a currency-trading platform with second by second interest rate payments that has also been licensed to a few banks. Behind the scenes, large banks discuss how to streamline the processing of financial transactions. Backing from the top management, however, is still lacking; but this can change at any time.





Global economic weather service

In our daily lives we take weather forecasts for granted. But in the domain of the economy and financial markets there are no economic weather forecasts produced by large-scale models similar to the weather forecasting models that process millions of data points every day.

There are only traditional econometric models processing macroeconomic data, which are updated on a quarterly or monthly basis. We need a global information system that processes macroeconomic data and information of financial markets on a real time basis to be available as a public service. This would reduce uncertainty during periods of crisis and provide decision-makers with the necessary information to take preemptive measures.

Again, for the record, Olsen Ltd has taken a first step towards building such an information system. We have recently released a Scale of Market Quakes (SMQ) service, which is comparable to a Richter scale in geology.

The SMQ measures the impact of political and economic events on currency markets. This is just a first installment and a lot more needs to be done, but it is definitely technically feasible.



Market stabilizing investment strategies

In a complex system, as for example the human body, dynamic processes play a vital role. The heart pumps five liters of blood every minute: this is necessary to transport fresh oxygen to the cells and remove toxic waste.

In our global economy the analogous is lacking: investments in the financial markets are largely based on trend-following strategies, such as buy and hold. If, for example, pension funds buy property, then this bids up property prices, which has a negative impact on private families who then cannot afford to buy a private home.

We need stabilizing investment strategies, which dampen price volatility; we need to prevent the oil price from first rising to 140 USD per gallon and then, within a few months, dropping to 30 USD, as occurred in 2008.

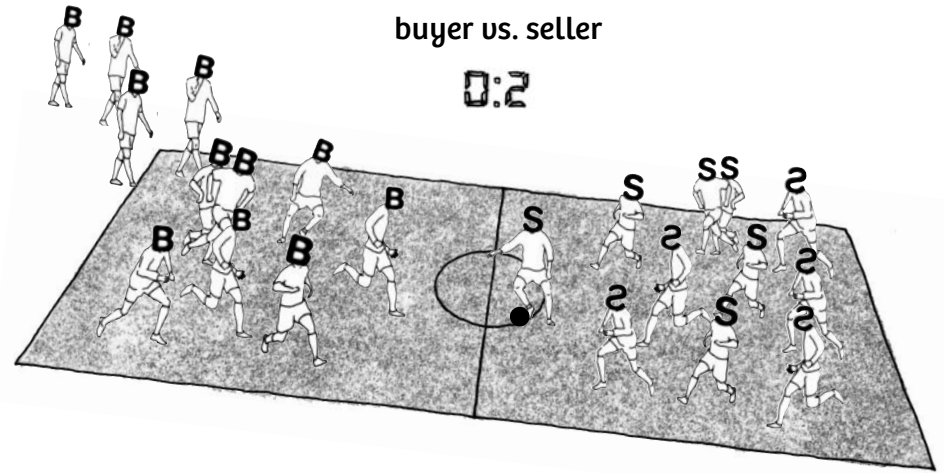
Investment strategies that buy assets when market prices fall and sell assets when prices rise, are stabilizing investment strategies that lower price volatility. The profits that these strategies generate are a reward that contributes to market stability. The world economy should invest the bulk of its assets in stabilizing investment strategies, which would reduce market volatility and increase economic efficiency.

It may seem impossible to develop stabilizing investment strategies because this would be akin to building a Perpetuum mobile. This, however, is not the case. The global economic system is not a closed system. It is possible to create value if a service benefits society at large. Investment strategies that stabilize markets do exactly that. An example of such a service is our investment products offered on the Olsen Investment Platform.

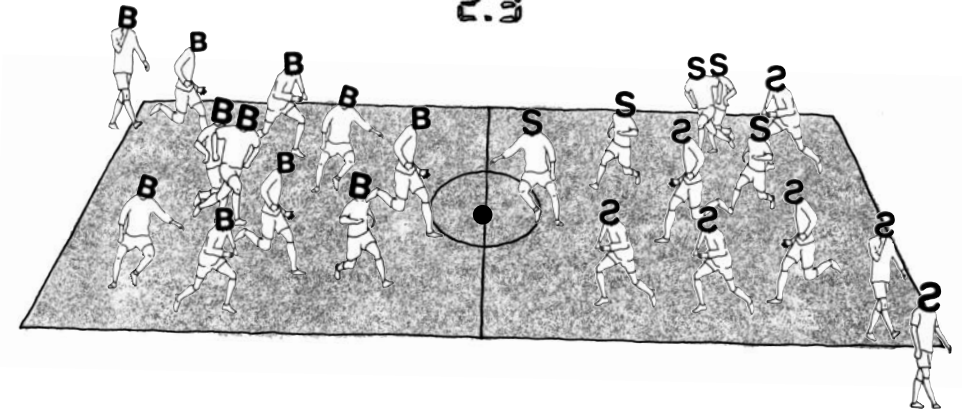


buyer vs. seller

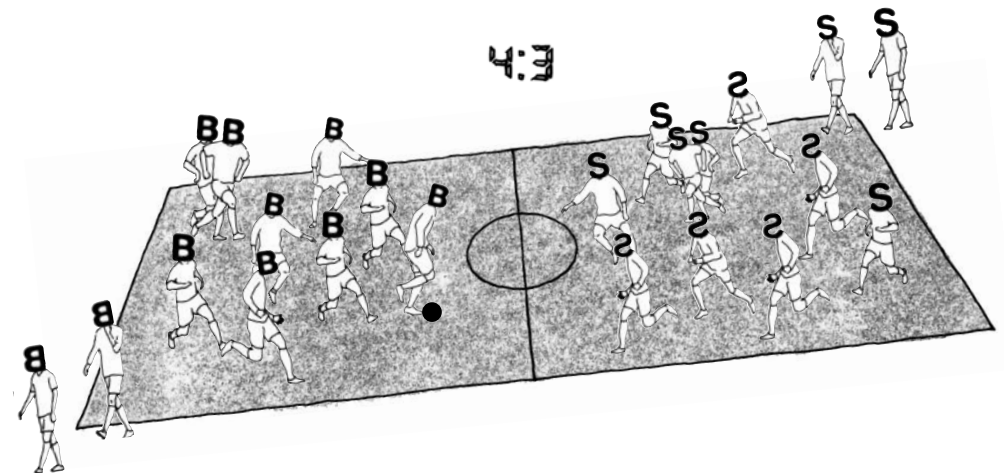
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Creative commons publication platform

Access to information is key for the functioning of the economy. With few exceptions, today's know-how is not a common good but is instead owned by individual publishing houses and patent owners. In nature, 'information' is frequently treated as a common good; accordingly, every human cell includes the full DNA even though any one cell only uses a small fraction of the information.

The social and ecological challenges that our society faces makes it necessary that we utilize information as efficiently as possible and serve the interests of the whole society. We can do the same by creating publication platforms, where authors can win prizes for the best contribution in exchange for consenting to make their work available under the creative commons license. This would, among other things, catalyze the development of a library of textbooks that is freely available over the Internet.

There are already a growing number of books published under the Creative Commons license. What is still lacking is a publication platform with prizes; but this is not difficult to build with modern Internet technology. Companies could fund the prizes as a way to build brand recognition, just as they do to sponsor sports events.

The same approach can be used to fund research. Instead of the traditional research grants, there could be a mechanism of prizes. Researchers publish their results and compete for research prizes. The winners would be able to use the prize money according to their own discretion and will typically invest the funds in the next research project in the hope of winning a follow-up prize. In this way, every researcher would have an incentive to publish his research results on the commons platform, so a much larger number of projects will become public knowledge than is the case today, where scientific journals suppress articles that are not published. The prize money system will foster the accountability of researchers and ensure efficient usage of research money. Recently, Netflix was highly successful in using this approach to improve its algorithms for its recommendations for customer-renting films - see Netflix 1 Mio USD competition for details.



Labor market

Unemployment is one of the big issues of modern society. In the current economic crisis governments have incurred huge deficits to fight unemployment. In addition, central banks have lowered interest rates to record lows to get the economy back on track, all because of unemployment and the fear thereof. To overcome unemployment, it is not enough to pump money into the economy; we must address the underlying problem.

Over the last 50 years, the typical employment relationship has morphed into a long-term employment contract with an intrinsic financial value. Employment contracts should be handled as a financial instrument, but modern labor law has failed to accommodate this development.

In the middle ages, the king and farmer entered into an employment relationship, which defined the work of the farmer and the place of his farm. Initially, their contract was short-term but over time it developed into a long-term contract. If the plot of land was located at an attractive location and could be used for an inn for example, the contract acquired an intrinsic value. Farmers tried to capitalize and take advantage of the value of their land by selling their employment contracts, but initially they could not do so. It took several hundred years for society to accept that an employment contract between king and farmer should be transferable. In the United Kingdom, this development gave rise to the so-called leasehold that is still today a prevalent form of ownership for land. Thus, landownership originally evolved from an employment contract between king and farmer.

I argue that a similar development should take place with today's employment contracts. I realize that this sounds provocative but let us imagine that employment contracts could be sold and bought like other financial instruments. Employers could sell employment contracts to raise money for creating jobs. Employees could buy their jobs subject to the constraint that they have the appropriate professional qualifications. Employees should be allowed to use their unemployment benefits as equity and obtain a mortgage to fund the purchase of a suitable job. The pricing of jobs would be similar to the property market where specialists value properties.

By converting employment contracts into financial instruments, employees would acquire an ownership interest in their company, transforming traditional companies into a modern-day cooperative. Treating employment contracts as financial instruments would increase the flexibility of the labor market and address the unemployment issue at its roots.

Governments have responded to the economic crisis by lowering interest rates to nurture the economy and spending huge amounts of money to create jobs through employment programs. My proposal is bottom up and can be initiated in a step-by-step approach by first relaxing the constraints on the disbursement of unemployment benefits and allowing employees to use their unemployment benefits as working capital to build a small business. This would set the stage for companies that plan to expand production facilities to apply for funding with labor offices in exchange for the number of people that they get off the dole.



Corporate States

The economic crisis has forced governments to incur large deficits that have undermined the government finances. Going forward governments will be forced to scale down public services.

The institution of a political state with a democratic constitution is a consequence of the absolute power of kings in 17th-century Europe. The governments had a monopoly power over their people because the people could only emigrate at a great cost. The democratic processes were introduced to make the governments accountable. Democracy was thus a substitute for the lack of choice, which is typical for a competitive market place.

During the past 200 years more and more industries have evolved where suppliers have an oligopoly or a monopoly over their customers. Companies with a monopoly or oligopoly of power are similar to the absolute states of the 17th-century: the typical CEO has discretionary power comparable to a monarch. The citizens of a corporate state are the customers of the company.

Whether we are aware of it or not, today we are all citizens of Google and Microsoft.

What we miss are democratic processes that make these corporate states accountable.

Corporate democracy is more straightforward to implement than we might think.

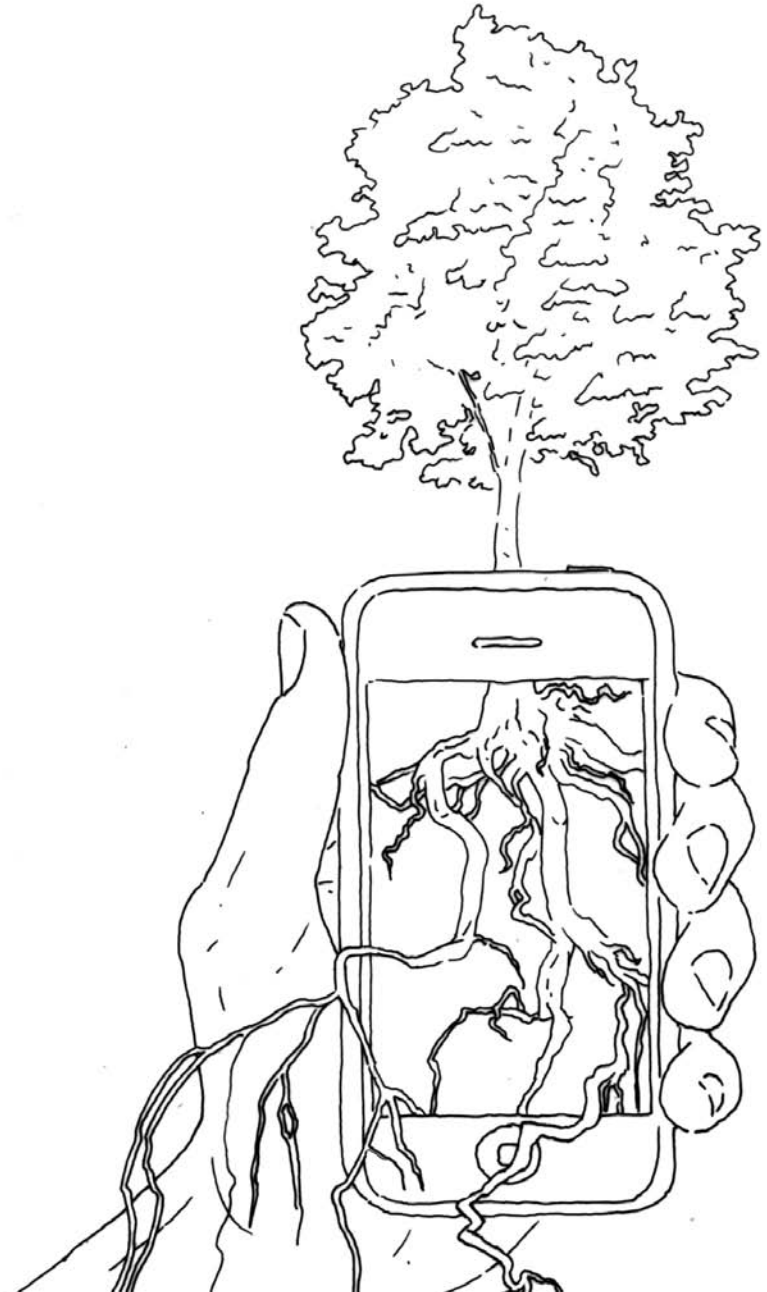
As a first step towards consumer democracy, we can utilize the fact that large companies routinely survey their customers. We can ask them to publish the results of their surveys on the Internet thus creating a platform for debate. These platforms would nurture public debate and create pressure for companies to adhere to customer requests. On the initiatives of their consumers, corporate states would take on more and more public services.

The introduction of democratic corporate states has several advantages: companies with oligopoly or monopoly power typically have strong balance sheets, access to specialized domain expertise not available to traditional states and an international network making them ideally suited for international projects. These features make them ideally suited to take on tasks that we have traditionally relegated to the political state.



Environmental issues

Newspapers report regularly on environmental issues covering a broad range of topics from resource depletion to air pollution. For readers it is hard to find their way and arrive at a definite idea of what the actual state of the environment is and to understand how they should live as responsible individuals. The environmental issues are, by their nature, highly complex and there is no one answer suitable for all cases. The environmental debate has focused on obtaining commitments from countries to limit emissions and agree on specific quotas. In addition, developed countries are being asked to transfer payments to countries that are particularly exposed to the impact of global warming. In all this debate, the focus has been on setting limits and constraints; there has been too little discussion on the larger context of how we can change the underlying mechanics of the global economy to be less energy intensive. It is one thing to improve the fuel efficiency of cars, but it is even more effective to find ways to live together that do not require private cars. The introduction of teleconferencing is one example of how we can reduce travel and improve our environmental profile. The gadgets of modern technology are a result of our ingenuity in leveraging subtle mechanisms, such as the behavior of electrons to build computer chips and then embed them in mobile phones, such as an Apple iPhone, and the development of sophisticated computer applications. It is not only human beings that decide how the global economy operates; so do many social institutions, ranging from something as abstract as language to law, contracts, corporations, financial instruments, exchange based and over the counter markets as well as political institutions, such as the United Nations and the different national states with their respective constitutions. These social institutions greatly impact how we as individuals behave, how we consume and save and what our environmental impact is. We can improve the energy efficiency of global society by appealing to the individual but it is equally important to do so by creating social mechanisms that improve our environmental footprint.





Outlook

These initiatives that I have outlined are motivated by the desire to improve the functioning of the global economy. The reforms of the financial system are intended to increase the stability of economic markets, reduce price volatility and enhance economic efficiency by minimizing the losses incurred by unnecessary price shocks. The global crisis has cost approximately 4 trillion USD; just imagine if only part of these losses could have been prevented by the proposed measures. Society has to make up for these losses and, in doing so, incur another round of environmental damage. It is thus important to try to prevent these crisis. The commons publications platform seeks to contribute to economies of scale by making information omnipresent and thus increasing its accessibility to enhance efficiency. The proposal to leverage the intrinsic value of a job and turn employment contracts into financial instruments promises to transform the employer-employee relationship thus increasing the flexibility of the labor market and contributing to full employment. Corporate states should fill the void left by the traditional political states, which are over-indebted and must reduce expenditure and curtail their public services. Corporate states are better suited than political states to tackle the environmental issues: they have a strong domain knowledge, they have an international presence and can overcome the antagonism of national differences that have bogged down progress of international political initiatives.

This is only a brief description of the main ideas that I have developed over the past 35 years. There is so much more to say and explain, but this will follow in future blogs. I ask readers to ask questions, and I will try to give answers.

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