MONEY CREATION ISSUES

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Abstract

Money in the current system means debt. Consequently, the way, in the current system, that we have to have money is to borrow it. One of the ways that the economy was kept going was by providing cheap credits to people who couldn't really afford things anymore. Banks create new money whenever they extend credits. The amount of money they're creating out of nothing is just incredible. Of course, this newly created money is being distributed according to the priorities of the banking sector, not the priorities of society. There are two main issues with allowing banks to create money. Firstly, by creating money when they make loans, banks impose that a healthy growing economy has to exist, which is not always the case. The second big issue with allowing the banks to create money is their incentive to always create more. They create more money if they issue a loan. If you trust bankers to control the money supply, it will just continuously grow, as the level of debt will do, until the point when it crashes.

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Introduction

How is money created? For example today only small part of the total money supply was physical cash. The rest of the total money supply, commercial bank money is not physical cash, but this money exists. Imagine, if you create a 100 note you can ask your bank to put it into their ATM and the bank would have to repay it 100. There would be no interest charged on that money, but that money is then transferred to the Treasury. This is often used by governments as a form of fundraising. This form of making profit by issuing currency is called seigniorage. In fact, there is always a difference between the face value of notes and coins and their production costs. For instance, when the Central Bank creates a 100 note, it costs less to actually order to print that note. After this, it is sold to banks at face value. The difference between printing the note and actually selling it for 100 goes directly to the treasury. So, in effect all the profit obtained from creating physical money or bank notes goes to the Treasury and by the way it reduces the taxes people have to pay. This type of fundraising began in some countries after the Second World War. This was one contributing factor in the government's ability to finance post-war reconstruction. In some countries prior to 1844 bank notes were created by private banks and the government did not profit from their creation. In the 1840s there was no law to stop banks from creating their own bank notes. So they used to issue paper notes as kind of are presentative of what one has in the bank account. Instead of taking the heavy metal coins out of the bank and then go and pay somebody with them, one can get a paper and give it to somebody, who will use it to get the heavy metal coins from the bank.

Today, these paper notes became as good as money. People use paper notes instead of going and getting real money from the bank. Obviously, as soon as banks have realized the profit generated by these paper notes, it was interesting for them to create more. This is what happed until the 1840s. In the 1840s they pushed it just a little bit too far and that caused inflation, destabilizing the economy. Since then everything has gone digital and what we now use as money is the digital numbers.

Description of the Problem

Today most of the money in circulation is electronic money. Money held in bank accounts is called demand deposits. This is an accounting term the banks use when they create credits. Banks follow the same process when they create loans. All money held in bank accounts is an accounting entry. In fact, when banks issue loans to the public, they create new commercial bank money. When a

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customer repays a loan, commercial bank money is destroyed. The banks keep the interest as profit. Exist misconceptions about the way banks work. Some persons think that when you put your money into the bank it just stays there and it's safe. In the same way as a child who keep some money in a piggy bank and during a rainy day he smash it and take the money out to spend it. So a lot of people keep this idea of banking. The other people assume that there is a continuous moving of money. When you put your money in a bank, that money is then being moved across to somebody who wants to borrow it. But actually banks don't work like that. It's basically an accounting trick. Banks create money. They don't lend it. When a bank gives out what is called a loan, it basically pretends that you have deposited the money. It has to invent the liability. This is how the money supply is created. According to Paul Tucker - Deputy Governor of the Bank of England about 97 to 98% of money that's created is created as bank debt money. When banks make loans they create new money, they create additional deposits for those that have borrowed the money. Most economists don't have this full picture. They don't understand all the elements of the system. They rely on assumptions, on received knowledge without actually going into the details. As money is the center of the economy, if you don't understand where it comes from, who creates it and when it gets created then how can you understand the entire economy? Do not forget, the vast majority of money that we use now is not cash, but electronic money. Obviously creating electronic money is much more profitable than creating cash because it generate no production cost at all. Banks create new money whenever they extend credit, buy existing assets, or make payments on their own account, which mostly involves expanding their assets. When a bank buys securities, such as a Corporate or Government Bond it adds the bond to its assets and increases the company's bank deposits by the corresponding amount. New commercial bank money enters circulation when people spend the credit that has been granted to them by banks.

Most people have an idea of how money is. They are used to their own way of handling money and they try and implement their own idea of how their small household economy works into the national economy. And of course it just doesn't work out at all. One of the reasons of the difficulties we have to understand the banking system and credit creation is our background. When we leave school and get finally a job, we work really hard during the month and at the end of the month our company puts money on our bank account. So, logically, you work and as a result you get money. In reality you would never have got that job if credit hadn't been created in the first instance. It's a really important conceptual misunderstanding. Money doesn't come out only of economic activity. A lot of people do the mistake assuming that money comes only from an activity process (doing, making, growing or selling). The paradox is that if we don't want any debt then we will not have any money. Contrariwise, if we go into further debt, more money will enter the economy. All of this vicious circle will work until a boom, when people get over-indebted and can't re-pay their mortgage. That's what happened at the beginning in sub-prime America and caused, through (Allen F. and Gale D., 2000) contagion (Baur D. and Schulze D. 2002), (Bekaert G., Harvey C. and Ng A., 2005) effect a wave of defaults, a financial crisis. Banks become insolvent and stop lending. Situation changed dramatically from the period when banks were excessively lending, now they stop lending and that makes the recession even worse. Thru contagion (Glick R. and Rose A.K. 1999) people lose their jobs and then they become even more dependent on debt. It was needed to survive. So, it is important to know the source of contagion also (Van Rijikghem C.V., Weder B. 2001) and how banks works, normally, banks don't want to carry around huge quantities of cash money because it's dangerous, inconvenient and expensive.

Thus, what they do is paying each other in electronic money. As there are a limited number of banks in the system, the central reserve money can only be moved around them in a closed loop. The money is just circulating through this system over and over again and if you think about it, one coin could be used to make a billion of payments if it was circulated billion times. And that's effectively the system that you have now, is you have a small pool of real money that's just going round and round the system and it's being used to make a huge quantity of payments on our behalf. The Central Reserve Currency is what is referred to as the real money in the fractional reserve model.

Methodology

If you look over the history of money over at least the last 150 years, you will find at one moment the development of a gold standard that really comes to the fore in the 1880s/1890s. At that period, countries peg themselves a particular defined value of gold and then they have an agreement to fix/ to hold that value or to trade gold among themselves to make sure the balances are all at the determined point. Countries also could try to restrict or expand their own economies in order to make sure that the balance, that particular fixed price, is maintained.

This gold standard principle disintegrates after the First World War, when things broke. A major dislocation in the international monetary system occurs. With the Bretton Woods agreements at the end of the Second World War system changed. This time, everything was pegged to the dollar and the dollar itself was pegged to the gold.

So everything removed from gold backing or saying to paper money and the credit money that we are all using today. In 1944, at Bretton Woods, the US and the UK began to negotiate how to govern the world economy and the world monetary system and came up with the World Bank and the IMF and a series of other institutions designed to manage the global currency and there was still a gold standard, but this gold standard was going to be tied to the dollar. This system was designed to manage the imbalances, to avoid credit crunches, trade deficits or currency collapses. The currencies were managed and the system was stable, as long as the Americans played the role of oversight. And when the Americans were no longer respecting their role, the system ended. The quantity of money that was needed to pay for the Vietnam War and the Oil shocks determined the Americans to inflate the value of their own currency that ostensibly was meant to be tied, tied to gold and to every other currency. French president doubting about the honesty of President Nixon asked to take their gold back. Did they get their gold back? Go on, guess! This marked the Bretton Woods system end and the beginning of the modern era of the financial system. To resume, historically, money creation was pegged to a commodity, often gold, but today it is pegged to nothing. This means there is nothing backing our money?

Where does this leave us? If money is based on nothing, why do we think it has any value? Because we can still go and exchange it. It is noteworthy to indicate that the word “credit” comes from the Latin “credere”, which means belief. Since the collapse of the dollar gold standard in 1971 and the deregulation of the financial system, money creation has grown exponentially. The World Economic Forum meeting in Davos indicated a need for credit within the global economy to be expanded. They believe this credit expansion will create a boom because there will be more money in the economy with which to make investments. If you want a growing economy under the current set-up we have to have growing debt. One must keep in mind the effects of rapid credit expansion. One of them is inflation. Inflation is a rise in the general level of the prices of goods and services in an economy over a period of time. When the general price level rises each unit of currency buys fewer goods and services. As the money supply grows and there is more currency available, more money is available for investment which can lead to growth, but more money is also available for purchases of goods and speculation which leads to inflation.

Essentially, inflation is what happens when too much money is chasing too few goods and services, so there is too much money for the actual output of the economy. However in practice inflation is much more skewed and complicated. Measuring inflation is not a science and the way it is recorded poses a dilemma. However this measure is deemed to provide a consistently low figure for inflation. It is depend how to calculate inflation. Many western countries heavily subsidize agricultural production, which has the effect of keeping prices and inflation low. Increasing house prices, it may make you feel like you’re becoming wealthier, but as your wealth increases the effect is that your children’s wealth is actually decreasing. So in fact there is no net gain in wealth because your children are going to have to pay even more when they want to buy a house. So in effect there is no net increase. What is happening? So it’s another example in some countries of a very regressive policy to allow house prices to simply inflate. It makes everybody feel like things are going well and people spend money on other stuff, they take equity out of their houses but it’s not creating new jobs. It’s not enhancing the quality of the economy. It’s not helping balance of trade. It’s not helping the public deficit. In some countries 85.5% of consumer lending was secured as mortgages on dwellings. Thus, the only thing creating money was housing, then its prices increased. That’s why houses prices went up in the way they did. It was just a way to pump a lot of money into that market. That’s an increase in the amount of money in the economy without a corresponding increase in activity in output, in GDP. It's non-GDP based spending. Thus, the main cause for the housing boom, in my opinion, is the huge amount of speculative credit created by the banks for housing. (Campbell J.Y. , 2014) Houses would be seen as places to live rather than as places to invest.

As more of the country's resources and industries are privatised the private sector takes on more debt. Some private equity companies have taken this theory to the extreme, engaging a practice known as a Leveraged Buy Out. It involves that a company is purchased at an often inflated price and the purchase price is transferred to the business as a debt. The company becomes responsible for the funding of its own purchase. These debts are often so great that the company needs to reduce staff, salaries and research activities. When you have to factor interest as a business, if you have to factor interest repayment into your goods and services, then you have to charge a perpetually higher price as you take on more and more debt. When the money supply increases more money is available for productive activities and consumption which is the condition for a boom. It's kind of the system that we're locked into, we can't grow the economy without growing the debt and the debt is the very thing that will bring down the economy.

One option is to reform the actual money system and to force banks to stop creating money as debt. By fixing the monetary system we can prevent the banks from causing another financial crisis and we can also make the current public service cuts and the tax rises and the increase in national debt unnecessary. The current monetary system allows the banking sector to extract wealth from the economy, whilst providing nothing productive in return. So a growing banking sector is not a good thing. If the banking sector is growing it's becoming less efficient and have a negative influence on the rest of the economy. If we want to have a chance of tackling big social issues, we have to figure out the money issue. Obviously, the state monopoly on bank currency that we nowadays have is very good thing from some point of view. It's very easy to trade internationally with it. It helps big businesses, it cuts down their transaction costs but it's not so good for independent businesses and it's not so good for localities. So if we have a money system where the rules value community and connection between people within communities over time you build up a better and more wealthy basis for a diverse local economy.

A bank run can take three forms: customers can withdraw their money in cash. However this will not reduce the digital money supply. It will only merely transfer ownership. They can shift their money from large institutions to smaller more ethical banks such as credit unions, mutual banks or independent building societies. Shifting commercial bank money to these institutions will reduce the monopolistic grip of the big banks. The third kind of bank run is the international one. When money is withdrawn internationally from one currency to another the reserve currency shifts from the national bank of one country to the reserve account of the foreign bank. Foreign banks have relationships with local banks that allow them to hold foreign reserve currencies whilst not being a part of the central bank scheme at the local central bank. What happens when currencies and the exchange rate system is no longer managed? Which are some of the first consequences? Devaluations. Speculation. Imbalances. The reserve currency needs to be spent in the country of origin or exchanged into other currencies. Most foreign banks do not have deposit taking accounts outside of their national borders and as such the foreign reserves they hold do not come back to them as deposits. A balance of trade is basically the difference between what you're selling abroad and what you're buying from abroad. Foreign exchange reserves cannot be directly used for domestic spending. The money can only be spent abroad or on imports. A country with a large balance of trade deficit relies on its creditors to spend the imbalances accrued in its own market.

Obviously all of us trade currency fairly regularly. If you go abroad you exchange it into another currency. That's a form of currency trading. That happens fairly regularly and that's a conventional part of the trading process. Large corporations have to do this on a regular basis. It becomes something that people question and consider a speculation, when you get people realising that currencies move around. There's always an opportunity to try and make money out of those exchanges in value and therefore you can speculate on it. That's the more questionable end of the market, that's the bit of the market that things like a financial transactions tax will try and chop away at. The wrong assumption that this process just produces instability for everyone else is still present. People involved in want volatility in the market, because that's how they make their money. They want to encourage it and they do encourage it by trading and speculating in the way they do. Volatility or variance what are used for ? Some for making forecasting or structural analysis etc. Another ones are looking at volatility as opportunity. By 2010 the exchange market had grown to the largest and most liquid market in the world. Volatility became a need (Wu Y., 1997). What could small developing countries do in case of huge and instantly fluctuating financial flows? What do they have to do to cope? Increase their production and sell more by lowering the prices. This international system seems peculiar. Almost everything depends on simply sentiments and beliefs about what an economy is like, rather than it depends on what a economy represents itself. Consequently, everything can shift very rapidly. If that belief changes it can change very fast the financial market. The process of financial contagion (Dornbusch R., Park Y.C. and Claessens S., 2000) can take place in just minutes or seconds. You can just move from being an apparently quite stable robust economy to a less promising one. Just because sentiments has turned against you, you can find that markets are picking on you.

Much of the changes in the way that the global economy works over the last thirty years have resulted from debt. It's a direct form of power that's being used over poorest countries to force them to do what are really in the interests of the richest segments of the world. As a result of that corporations become enormous and made huge amounts of profit. The financial sector has become even bigger. The real money to be made in the world today is not by producing anything at all its purely by forms of speculating. Making money from money - that's the most profitable and by far the biggest form of economic activity that exists in the world today. To protect themselves, vulnerable countries need to accrue currency from rich countries.

What we've seen since the 1970s is a dramatic increase in a series of phenomena that have had a simulative effect on the changes in the financial system. To compensate the lack of a defined commodity based value underlying currencies, financial institutions developed securitisation as a tool to manage risk.

Until the 1960s, the Securities and Exchange Commission would be quite clear that derivatives that weren't based on real products, like agricultural products, weren't allowed to be traded. That changes in the sixties. Everyone can trade currency futures, things that are not based on real products, but based on the movement of currency prices, being traded at a moment in the future. Once you have the system of fixed exchange rates breaking down obviously this accelerates enormously. This implies the rollback of government regulation here and the theory is that the market is better at regulating itself, than when a government is interfering all the time.

In the last decade we had a mathematical - financial innovation, derivatives, CDO, CDS (credit default swap). Everybody is suddenly sitting there saying that these CDO's, in fact, don't provide the kind of stability previously thought and one of the big problems was too much reliance on mathematical science applied to economy. As example CDO as the most famous model for pricing structured credit securities is the Gausian copula model. A common fallacy is that the marginal distribution and correlation matrix are sufficient for describing the joint distribution of multivariate distribution. But correlation only measures linear dependence. If we simulate points from the bivariate normal and Meta-Gumbel distribution, bivariate distribution have standard normal marginal distribution, and in each case the correlation is the same, but Meta – Gumbel distribution is much more likely to anticipate large joint moves. The complete nonsense it turns out is that there's far more risk attached to trying to securitise risk and securitise debt in the way that was done. The attempt to get more and more complex ways of regulating and shaping a financial market and trying to make a quick buck out of it, helped produce the opposite effect and led to a spectacular crash. What we saw as a result of this situation was that one sector grew above all, the financial sector.

Often the authorities are guilty for this kind of situations. Economists consider that, on one hand, the FED's mistake produced the great depression and could even rule the crisis 2007-2010, on another hand some economist argue that not only authorities but world class economist are involved in crisis, as in the 1997-1998 financial crisis (caused by the Long Term Capital Management - LTCM), a hedge fund that appeared in 1994 and whose near-bankruptcy in 1998 put the international banking system at a major risk and created major disruptions in the financial markets. LTCM enjoyed from an impeccable reputation and boasted two Nobel Laureates on staff: Robert Merton and Myron Scholes. Some economists consider that their theory, called "new method to determine the value of derivatives", caused the crisis.

At the beginning, LTCM invested in risk arbitrage strategies and was well known for its acumen in this area. The company was also known for receiving favourable terms from lenders and trading partners based primarily on its sterling reputation. In the early 1997, the US dollar had risen by roughly 50%, due to the so-called Reverse Plaza Accord. The rising dollar weakened Asian economies. Many countries (Thailand, Indonesia, Philippines, Korea, Russia, Brazil, etc.) had substantial amounts of US dollar–denominated debt. Thus, the rising US dollar presented these countries with a stark choice—either devalue their home currency to re-establish an attractive price on the foreign exchange market or live with the higher currency, be forced to repay much greater amounts of foreign-denominated debt, and live with a longer, more severe recession. In July 1997, Thailand succumbed first, breaking the peg on the Thai baht. One by one in rapid succession, other countries with similar financial profiles (Indonesia, South Korea, Malaysia, the Philippines, etc.) also experienced a currency crisis. As a consequence, a much larger flight to liquidity occurred than LTCM had anticipated when constructing their portfolio. Their positions designed to profit from convergence to fair value incurred large losses. As LTCM teetered, Wall Street feared that Long-Term's failure could cause a chain reaction in numerous markets, causing catastrophic losses throughout the financial system. Seeing no options left, the Federal Reserve Bank of New York organized a bailout to avoid a wider collapse in the financial markets.

The lessons that should be learned from these are: banks should have been broken in smaller units, derivatives should have been banned, as in the case of LTCM almost the opposite was done, allowing derivatives and leverage. The investment policy has to be based on ratings. It is impossible to make a financial product without resorting to a rating agency. Rating agencies, or credit rating agencies, evaluate the creditworthiness of organisations that issue debt in public markets. Rating agencies assign a letter grade to each bond, which represents an opinion as to the likelihood that the organisation will be able to repay both the principal and interest as they become due.

The problem is that conflicts of interest exist and if someone needs to get the highest rating he will get it by paying the rating agencies. Consequently, the rating, which is like a mark at school, will not be as objective as expected, because no longer based on fairness. The methodology of the ratings agencies is not without flaws, and they are under considerable scrutiny regarding the inaccuracy of many ratings categories during the financial crisis. In this state of art, a lot of people criticize rating agencies because organisations are not always equal in front of them, but no one has made a better alternative. During each crisis there are pressures on rating agencies.

Results Obtained

May be we need a new kind of currency that is backed by something like energy or renewable energy, for example, a kilowatt hour backed currency would be very interesting. We need to start valuing things that are most scarce and that we need to survive as a human race in the long run. Backing an international currency with something like that will generate enormous investment in, for example, renewable energy, if that's the primary international unit of account that is being used.

May be another option is a basket of currencies, thus you mix up the value of different currencies to create a very solid currency that people have confidence in. What does a progressive financial system look like? Control over how money is created and what it's used for is a democratic issue. You currently have the profit seeking banking sector- not accountable to anybody other than themselves -who are creating new spending power and deciding where in the economy that goes.

Monetary reformers believe that that entire money supply should be for the benefit of the public and should never be created by a private organisation as debt. Democratising the money supply - what that means is putting the power to issue and allocate money back into hands of people and taking it away from private organisations, institutions that don't actually represent the people, that aren't democratically accountable to the people. The banks aren't democratically accountable to the people, they're accountable to their shareholders and their shareholders only. Now they're underwritten by us by the taxpayer but they're not accountable to us. That doesn't make any sense at all. So, if you democratise the monetary system, you are subjecting it to the same kinds of discipline as the education system, as the health service and other key publicly needed services. There is no reason that money should be viewed as any different. It is a fundamentally important service that everybody needs. I can't survive without enough money, nobody can. May we do need a different system.

Conclusions

A lot of models (Kodres L.E. and Pritsker M. , 2002) doesn't make any sense either from an orthodox free market perspective because these banks are monopolists - effectively they monopolise credit creation so they don't obey the rules of any free market discipline. Yet at the same time, they are not producing socially or environmentally beneficial outcomes along any real scale.

The power to create money is so powerful. You've got to be very concerned about who has that power. If it's somebody who's going to benefit from creating the money then they're going to have the incentive to create more than the economy actually needs. The same would probably happen if you give that power to politicians. You know you can't trust the politicians to be trying to please voters and to have power over creating money at the same time. It's a real conflict of interest. The only thing you really can do is to give it to somebody who has no conflict of interest - an independent, transparent, accountable body. Money could be allocated according to the needs and desires of the population. Systems could be put in place to allow for direct democratic allocation of funds either wholly or partially. A framework and rules could be established to incorporate up to date economic theory into how much money should be created and for what types of purposes. The Government would no longer be able to get access to large sums of money to pursue armed conflict if this was not sanctioned by the populace. We would be able to see exactly what they're doing with the power to create money. We would be able to see how much they're creating and where that money is going. And that is pretty much the only way we can get control over the power to create money and stop it being abused.

Future Directions to Be Approached

May be person to person banking has been around for a while. It's essentially the eBay of banking, so it allows borrowers and lenders to be put together in a marketplace. Default rates at the largest peer to peer lender. Risk is minimised by pooling funds so that each investor's contribution to a specific loan remains minimal. There's a site which is about currency exchange, so again, by passing the kind of mainstream banking or currency exchange system and just doing it person to person. A lot of the interesting stuff that's going to happen around currencies and around money more generally is to do with the impact of the internet.

My gut feeling is that we will see more and more of those types of systems. We will also see more and more applications and things using our phones than we would ever have imagined and I think we're only just at the beginning of that. The issue of monetary reform has historically been a very sensitive issue because of the incredible power, wealth and privileges it bestows. In an age where analytic thought and a scientific approach are held in such high esteem there is no justifiable argument for keeping the mechanics and implications of the monetary process such a taboo subject. As democratic citizens we have the right to demand a monetary system which is both stable and beneficial to society. The banking lobby is very powerful. I suspect that they won't be in favour of these kinds of models although ultimately one could argue that it's a much more stable footing for banks.

Analyses show that a shift in monetary system occurs. The classical system have been used until 1920, the Gold standard until 1940, Bretton woods ended in the 70's and after this the US dollar system begins. Nowadays, some countries start to abandon US dollar. Should we imagine that a new monetary system will be used in the future?

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