Dear Madams and Sirs,

I would like to express my full support for the proposal for a parliamentary resolution regarding the separation of money creation and lending function of the banking system which is sponsored by Lilja Mósesdóttir. There are strong scientific arguments supporting the claim to form a committee of specialists to deal with this highly topical issue and in particular to analyse which social benefits the proposed monetary reform would have and how it could be implemented.

The monetary system rules finance which today essentially determines the economy. In the last decades this fact has been widely neglected when discussing the negative social and ecological effects of business activity. Even current debates on the 2008 financial crisis that evolved to the biggest economic crisis since the Great Depression and is still persisting show no awareness of the significance of the monetary system for finance and the real economy.

How is the present monetary system affecting the economy and thereby society and nature, and why is it failing? I will outline the interconnected malfunctions of the globally prevailing monetary system in ten points.

1. **Money is debt.** Today, money comes into existence exclusively by debt creation when commercial banks borrow from central banks and governments, producers and consumers borrow from commercial banks. Thus, the money supply of the economy can only be maintained if the private or public economic actors get into debt. Economic growth requires a proportionate increase in the money supply in order to avoid deflation that would paralyse business, but an increase in the quantity of money involves a simultaneous increase in debt. This way, economic actors run into danger of excessive indebtedness and bankruptcy. It is not necessary to say that overindebtedness causes serious problems to societies and individuals in...
the face of the ongoing debt crisis which began as a debt crisis of private homeowners in the United States and then transformed into a debt crisis of commercial banks and insurance companies before being absorbed by national treasuries and so turned into a sovereign debt crisis. Reductions in national expenditure required to pay off public debt often lead to social unrest and are inequitable because they impose burdens on citizens who did not profit equally from debt creation.

2. *The money supply is under private control.* Only a small fraction of the money circulating in public has been created by central banks. Central banks issue coins and banknotes which in most countries account for just between 5% and 15% of the money supply. Most of the rest is created by commercial banks in an electronic form as account money when granting loans to customers. But all money, whether cash or account money, is brought into circulation by commercial banks. Therefore, commercial banks *de facto* control the money supply. On the one hand commercial banks principally bear the credit risk for the loans they grant, which should induce them to carefully examine the creditworthiness of their customers. On the other hand, however, commercial banks decide which customers are granted a loan and which investments are made according to their interest in maximizing their own profits. Whether an investment is socially desirable is definitively not the decisive criterion for commercial banks. This way, investments serving the common good but not being profitable enough are not supported by the banking system and have to be financed by government spending that depends on tax revenues and public debt creation. Instead of financing long-term investments in the interest of society as a whole, commercial banks with their credit business nourish short-term financial speculation and over the last two decades actually have established a gigantic global casino beyond any public control.

3. *Bank deposits are not secure.* Bank deposits refer to account money which in contrast to cash is not legal tender although it is handled as if it were legal tender. Account money is a substitute for money, just a promise from the bank to disburse the corresponding amount of money in legal tender if requested by the customer. In the present fractional reserve banking system, usually only a very small proportion of account money is backed by legal tender. Banks hold only a few percent of their deposits as cash and reserves at the central bank. That is the reason why banks are reliant on the trust of their customers. In the case of a bank run, when too many customers at the same time demand cash, they would run out of cash and face sudden bankruptcy. Hence deposit insurance systems have been established to avoid the loss of bank deposits. In the case of chain reactions and large-scale bankruptcy as in 2008,
however, government bailouts of commercial banks may be necessary, eventually with the assistance of the central bank as lender of last resort.

4. The money supply is pro-cyclical. Commercial banks grant loans by creating account money in order to maximize their interest revenues. The more money they issue the higher their profits – as long as the debtors are able to pay. In times of economic growth banks most willingly grant loans so as to profit from the boom whereas in times of economic decline their granting of credit is very restrictive in order to reduce their risks. This is how commercial banks induce an oversupply of money in booms and an undersupply of money in recessions amplifying business cycles as well as financial market fluctuations and creating asset bubbles in real estate and commodities which may cause heavy damages to society and to the banking system itself when they burst. Again, the 2008 mortgage-triggered banking crisis after the burst of the U.S. real estate bubble is the most illustrative example.

5. The money supply fosters inflation. Besides its pro-cyclical character in the short term, the money creation of commercial banks in the long term induces an oversupply of money that leads to consumer price inflation as well as asset price inflation. Principally, an oversupply of money arises if the increase in the quantity of the money in circulation exceeds the growth of the production of goods and services. The long-term oversupply of money results not only from traditional granting of credit to governments, corporations and individuals but also from credit-leveraged financial speculation of hedge funds and investment banks. Due to inflation consumers usually face an annual loss of purchasing power, which means that they have to increase their nominal income in order to maintain their level of consumption. Since the ability to gain compensation for the loss of purchasing power by increasing one’s nominal income varies from individual to individual, inflation causes a redistribution of purchasing power to the disadvantage of unprivileged social groups which are not in the situation to effectively advocate for their own interests.

6. Interest on money is a subsidy to the banking sector. Since money is debt, it carries interest. Therefore, on all the money in circulation interest has to be paid for and virtually nobody can escape paying interest. Primary, of course, the customers who take up loans from commercial banks and thereby ensure the money supply are obliged to pay interest. Second, everybody who pays taxes and buys goods and services makes a contribution to the interest payment of the original borrower because taxes have to be raised partly in order to finance the interest payments on sovereign debt and corporations and individuals providing goods and services must include the costs of their loans in their prices. This way, by using money society pays an enormous subsidy to the commercial banks, a part of which they pass on to their customers as
interest payments on deposits. Interest is a subsidy to the banks because the account money they create is handled as legal tender; and it is a hidden subsidy because it is not subject to public discussion. The magnitude of the subsidy society pays to the banks is reflected in the disproportionately high salaries and premiums of bankers as well as in the disproportionately big banking sector which is dominated by a few giant banks. These giant banks hold assets that exceed the size of large national economies, so they really are too big to fail since their collapse would have disastrous social effects on a global scale.

7. **Interest on money forces economic growth.** Interest forces monetary growth and consequently the growth of the real economy. When customers repay their loans to the commercial banks, the banks write off the returned amount of money and the quantity of money in circulation correspondingly decreases. But the money that over time has been paid as interest on the loans does not disappear; it becomes the property of the banks. Debtors need more money than they have borrowed in order to not only pay back their loans but also pay interest on them. The additional amount of money needed for interest payments, however, can only be available to debtors if additional loans are granted by the banks. Otherwise the money supply would not be sufficient for the real economy to work properly and be profitable. It follows that the money supply must continuously increase to avoid economic crises. A financial system that cannot function unless it grows is nothing else but a Ponzi scheme. Yet, an even more detrimental effect of forced monetary growth is that it exerts a heavy pressure on the real economy to grow incessantly in order to back the additional money supply by additional economic production. The forced perpetual growth of the real economy involves an increasing exploitation and destruction of nature and thus impedes a sustainable development of humanity. This way, growing financial indebtedness caused by the monetary system leads to growing ‘ecological indebtedness’. Furthermore, the quantitative growth of the real economy will sooner or later inevitably end since the Earth’s resources are limited.

8. **Interest fosters wealth concentration.** Interest is commonly seen as a lending charge for using the money of someone else. Not only the customers who borrow money from banks but also the banks which hold customer deposits pay interest. When commercial banks create money by granting loans, they credit customer accounts and thereby expand the total of bank deposits. Since accounts usually carry interest, the banks spend a part of their interest revenues for interest payments to the account holders. Now, bank deposits and loans are not equally distributed among the customers. Some have mainly loans they pay interest on whereas others mainly have deposits they earn interest on. Because in general poorer people have more loans than deposits and richer people have more deposits than loans, interest
payments are in toto a transfer of money from the poorer to the richer people, especially to the few super rich. Interest thus fosters wealth concentration. This concentration of wealth to a great extent favours the commercial banks which on the one hand make investments themselves and on the other hand earn the amount resulting from the considerable interest spread between borrowing and lending rates. Moreover, interest is added regularly, for the most annually, to the initial investment and thus carries interest itself turning into compound interest and generating an exponential growth of monetary assets. But monetary assets do not grow in value by themselves since they are per se not productive. Value-increasing interest on monetary assets can only be generated through human labour; and human labour is permanently under a monetary pressure to increase its productivity and lower its costs so as to satisfy the demands of exponentially growing compound interest. Interest is therefore a value transfer that favours capital investments to the disadvantage of labour income.

9. The monetary system is unstable. There is clear empirical evidence showing that the monetary system suffers from structural instability arising from the mechanisms described above. The financial crisis that started in 2008 and is still lasting, if not even worsening, is not a unique phenomenon. In the last decades, numerous crises related to the monetary system occurred around the world. Between 1970 and 2010 a total of 425 financial crises affecting IMF member states was officially recorded: 145 banking crises, 208 monetary crashes and 72 sovereign-debt crises (cf. Lietaer et al. 2012:51). The multitude of financial crises and their contagion effect on separate national economies plainly demonstrate their structural-systemic character. The present monetary system inevitably evokes crises in finance and consequently in the real economy which in turn is the basis for the monetary system. Briefly, the instability of the monetary system is largely due to the fact that the monetary system is not compatible with a finite world.

10. The monetary system counteracts crucial moral values. A moral value is something that is seen as valuable from a general perspective after careful consideration. Moral values hence embody the most rational and most important values of society. Moral values and monetary values do not fully overlap; monetary values represent only a limited number of moral values. Money as a means to satisfy basic human needs, for example, is morally valuable whereas money harming the needy by speculative investments is certainly not. Since money, respectively the monetary system, rules the economy and dominates society, moral values not contributing directly to the profitability of business are systematically suppressed in policy making. This way, the current monetary system counteracts crucial moral values, such as solidarity, amicable relationships and a fulfilling life.
My analysis above clearly demonstrates the failure of the globally prevailing monetary system. The monetary system undeniably fails to ensure stability and security in finance, to enable a consistent and sustainable development of the real economy and thus to serve society as a whole. My analysis also shows that the apparent deficiencies of finance and the real economy can not be remedied without radically reforming the monetary system. Hence, it is about time to fundamentally redesign our monetary architecture. As Joseph Stiglitz and other experts, realising the prime importance of monetary reform, note in their recent UN-report: “The current crisis provides, in turn, an ideal opportunity to overcome the political resistance to a new global monetary system.” (Stiglitz et al. 2010: 166)

The monetary reform proposal
The monetary reform proposal traces back to the so called Chicago Plan that was proposed by leading U.S. economists in the 1930s in order to end the Great Depression and to avoid the occurrence of similar crises (cf. Yamaguchi 2011: 4f.). The monetary reform envisioned by the Chicago Plan was splendidly elaborated by the prominent macroeconomist Irving Fisher who predicated this plan being “incomparably the best proposal” to remove “the chief cause of both booms and depressions, namely, the instability of demand deposits, tied, as they now are, to bank loans” (Fisher 1936: 9). Accordingly, the core intention of the Chicago Plan was to take the control over the money supply out of the hands of the commercial banks and to restore actual governmental control over money creation by requiring 100% reserve backing for bank deposits. As a result of 100% reserve backing of all current accounts, commercial banks would no longer be in the situation to almost unlimitedly create money by granting credit, but they would be obliged to fully finance their credits by central bank reserves. These reserves which embody legal tender are given as loans to the commercial banks if they deposit appropriate assets as collateral at the central bank. In the case of 100% reserve backing, thus, the total of the money in circulation – cash and current account holdings – would be equal to the amount of legal tender issued by the central bank. And since the central bank works under the mandate of the government, the government would ultimately control the money supply and let the central bank enlarge the quantity of money to a degree which allows for a steady economic development.

In a recent IMF working paper, two experts rigorously evaluate the impacts of 100% reserve backing by applying the recommendations of the Chicago Plan to a precise model of the current U.S. financial system. Their results fully validate the benefits of this plan as claimed by Fisher (cf. Fisher 1936: 19f.):
“The Chicago Plan could significantly reduce business cycle volatility caused by rapid changes in bank’s attitudes towards credit risk, it would eliminate bank runs, and it would lead to an instantaneous and large reduction in the levels of both government and private debt. [...] One additional advantage is large steady state output gains due to the removal or reduction of multiple distortions, including interest rate risk spreads [...] Another advantage is the ability to drive steady state inflation to zero [...]” (Benes and Kumhof 2012: 55f.)

It is important to note that this conclusion refers to a version of the Chicago Plan which gives the government the exclusive right of money issuance. This result can be achieved in the following way. When commercial banks are obliged to back their outstanding credits to 100% by central bank reserves – instead of the 1%, for example, which is required in the euro zone at present – then they suddenly have to deposit very large assets as collateral at the central bank. If the central bank accepts only domestic government bonds as collateral for reserves, the commercial banks must fund their non-government loans with money which originates from government loans and comes into circulation by public spending or lending. So, the commercial banks are bound in the first round, when creating money, to grant all their credits to the government and deposit all the government bonds that they receive as equivalent from the government, at the central bank as collateral. Then, in a second round, they must collect existing money through income and borrowing in order to be able to grant credits and to facilitate productive investments. This way, money creation by commercial banks would be limited to the amount of loans which is requested by the government. Simultaneously, money would not come into circulation in the economy except through the treasury by public spending or lending according to government policy.¹

This government version of the Chicago Plan would solve the problem of how to guarantee complete congruency between the credits granted by the commercial banks and their holding of central bank issued reserves, but money would still represent debt and carry interest. Though the government could exercise a monopoly over money issuance, money creation would still depend in part on the willingness of commercial banks to give loans to the government and therefore these banks would have some bargaining power with regard to the interest rate of the government loans. Less rigorous versions of the Chicago Plan that allow the central bank to accept not only government bonds but also non-government securities as

¹ The government version of the 100% reserve system that I shortly describe in this paragraph contains core elements of, but is not identical with the version of the IMF working paper. The version of the IMF experts is more complex and makes further assumptions regarding the envisaged monetary reform; cf. Benes and Kumhof 2012: 18f.
collateral for reserves, are even more problematic, since they face difficulties in controlling
the money supply by monetary policy. The reason for this is that the commercial banks could
take an active role in granting credits to the private sector according to their own interests
leaving to the central bank just the reactive role of providing reserves for already existing
current account holdings.

Joseph Huber draws the logical conclusions from the government version of the Chicago Plan
when he in the present debate on monetary reform formulates the convincing idea of replacing
the unnecessarily complicated two-level banking system by a single-level system, in which
money is no longer backed by reserves, but money itself is the reserve (cf. Huber 2010 and
2012). Partially together with James Robertson (cf. Huber and Robertson 2000), Huber has
developed further the 100% reserve concept of Fisher by specifying it and adapting it to the
conditions of electronic data processing. The work of Huber is the most important theoretical
basis for the monetary reform movement that has come into life in Europe in the last years
and aims at a fundamental modernization of the current dysfunctional fractional reserve
banking system. This monetary reform movement includes the German ‘Monetative’
initiative, the Swiss ‘Vollgeld’ initiative (cf. Joób and Brändle 2012) and the ‘Positive
Money’ initiative in the UK. In the following, I will refer to the monetary concept of this
reform movement as “public money” – the term used by Kaoru Yamaguchi (cf. Yamaguchi
2011: 21ff.).

In the public money system, both cash and current account holdings are fully valid legal
tender and do not need to be backed by reserves because they themselves embody the reserves
and are completely safe from a legal point of view. Hence, money on current accounts would
not disappear in the case of a bank’s bankruptcy and governments would not have to bail out
large banks since a core element of the public money reform is

“[...] to take bank customers’ current accounts off bank balance sheets, and recognise formally what they now
actually are: accounts containing noncash money which belongs to customers, just as customers’ wallets and
purses contain cash money that belongs to them. In other words, customers’ current accounts will cease to be
accounts belonging to the banks. They will be containers of money belonging exclusively to bank customers.”
(Huber and Robertson 2000: 23f.)

This simple but very effective innovation would lead to a strict separation of money and credit
and would end the money creation by commercial banks which would merely hold customers’
current accounts in trust. In the public money system, commercial banks would be nothing
more than financial intermediaries and could therefore only grant credits from money which they have previously borrowed from their customers or owners (cf. Huber 2010: 92ff.). Similarly to Fisher who intended to put a governmental “currency commission” in charge of exclusively issuing reserves in the form of cash (Fisher 1936: 17ff.), the public money concept aims to establish a sovereign public authority with total control over the money supply, both cash and current account holdings. This monetary authority would represent a fourth separate and largely independent section of the state besides the legislature, the executive and the judiciary. It would serve the common good as “the trustee of a nation’s currency, defending its exchange value and its domestic purchasing power, creating, if necessary, additional money in accordance with real economic potential, and ensuring full seigniorage from the creation of money.” (Huber 2012: 9) The money created by the monetary authority would be transferred to the treasury and would come into circulation by public spending; thus, it would benefit the public purse and contribute to the reduction of national debt. Public revenue would be especially high in the moment of transition to the public money system when the money owed to commercial banks becomes owed to the monetary authority, which would significantly reduce public indebtedness. So, instead of bringing the commercial banks an extra profit, money creation would serve the whole community. This result is clearly proven by the macroeconomic modelling of Yamaguchi who concludes that in the public money system “looming debt crises to be caused by the accumulation of government debt can be thoroughly subdued without causing recessions, unemployment, inflation, and contagious recessions in a foreign economy.” (Yamaguchi 2011: 26)

Compared with the 100% reserve system, a great advantage of the public money system is that money would be issued debt-free by the monetary authority and would therefore not carry interest – unless, in a following step after being created, it is lent by its owner as an investment, for example to a commercial bank. Debt-free money issuance would considerably alleviate the current social and ecological problems arising from interest, such as forced economic growth and redistribution in favour of capital.

The proponents of the Chicago Plan were aware that their goal of establishing public control over money creation could be thwarted by the emergence of new financial instruments, specially bank-created securities, taking over the function of money (cf. Benes and Kumhof 2012: 18). This is a serious danger also to a public money system, in particular with regard to the interbank market. Financial regulations would be needed to prevent the emergence of near monies which would impair the monetary authority’s control over the money supply, for instance by prescribing a minimal holding period for financial instruments.
Another problem that needs to be resolved in a public money system is how to secure the independence of the monetary authority. Since governments generally seek to increase public revenue in order to enlarge their scope of action, they would be tempted to put pressure on the monetary authority to issue more money than the potential of the real economy and the principle of sustainable development in a given situation allow. In the same way as the independence of the judiciary is guaranteed today, the independence of the monetary authority from short-sighted political interests could be secured by an adequate institutional arrangement which simultaneously warranted complete transparency in monetary decision making and full democratic accountability of those who rule the monetary system. A central aim of the public money concept, after all, is to restore democratic control over the monetary system and thereby over the heart of the economy to make it serve the common good by promoting welfare, justice and social peace.

References