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Discussion paper

CALVIN'S RESTRICTIONS ON INTEREST: GUIDELINES FOR THE CREDIT CRISIS

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Calvin's Restrictions on Interest: Guidelines for the Credit Crisis

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Abstract

Calvin's view on the legitimacy of interest has had a great impact on the economic development of Western society. Although Calvin took a fundamentally positive attitude to interest, he also proposed several restrictions on the charging of interest. In this article, we investigate the relevance of these restrictions to the current credit crisis. We find that each of them provides a relevant interpretation of what went wrong in the build up of the credit crisis and gives directions to improve policies of banks and governments as well.

JEL code

B31, B59, G01, G21, G31, Z12

Key words

Banking sector, Bible, bonus system, Calvin, credit crisis, golden rule, reciprocity, government regulation, restriction on charging interest

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1. Introduction

In 2009, many Western countries commemorated Calvin's birth 500 years ago. Calvin has not only been very influential in theology, but also his social and economic thought has greatly influenced the economic development of Western society. This is illustrated by the well-known thesis of Max Weber (1958), who argued that Calvinism has provided a spirit from which sober bourgeois capitalism with its rational organization of free labor originated. Although Weber's thesis is drawn from the writings of later Calvinists (in particular English Puritans) rather than from Calvin's own views,¹ Calvin's writings on economy indeed provide a basis for legitimating capitalism. In contrast to Luther and other Reformers, who remained faithful to the medieval tradition of economics, he looked at the economy with the eyes of a businessman. He was not suspicious of the capitalistic spirit of entrepreneurship and acknowledged the need for capital, credit and trade. Also providers of capital have a useful function in society. By relating the prohibition of interest in the Bible to the context of the economy of Old Israel, he provided a way to legitimize the role of money and interest in the economy of his days. Calvin's position on lending at interest is therefore often considered a turning point in the economic history of the West (Tawney, 1964).²

However, Calvin did not accept capitalism unconditionally. Calvin perceived social-economic behavior as a vital part of the Christian worship of God (McKee, 2007). He therefore maintained a normative framework for economic behavior that, on the one hand, allowed for free enterprise, but at the other hand limited excesses by regulations. In this article, I am particularly interested in the type of restrictions that Calvin proposed for the capital market. Western economies, and in particular the Anglo-Saxon model of capitalism that dominates the economy in the US, have largely disregarded these restrictions. The question therefore arises whether capitalism can do without the type of restrictions that Calvin proposed. In order to research this question, I take the credit crisis as a case study. Because 2009 is not only the year in which we commemorated Calvin's birth 500 years ago, but also a year of worldwide economic recession following the credit crisis in 2008. The research question of this article is therefore: What can Calvin's restrictions on the charging of interest learn us about the moral deficiencies that became apparent during the credit crisis?

The content of the article is as follows. First, I will give a short description of the economic context of Calvin's days and summarize Calvin's view on banking and interest as well as Calvin's related views on richness and the duty to assist the poor. After a short overview of the main actors and main causes of the credit crisis, section 3 will apply Calvin's principles on interest to the current credit crisis and research in what sense these principles can help us understand what went wrong. Section 4 will conclude with implications for future policies of banks and governments that follow from Calvin's restrictions based on the analysis in section 3.

2 Calvin's View on Interest

Historical Background

The sixteenth century witnessed an unknown burst of economic energy as a result of the extension of trade and exploratory expeditions overseas. Because of the commercial growth, the financial system developed to provide finance for the growth in trade. New industries and the growth of international trade required new, specialized forms of finance. Some expeditions overseas were so expensive, that they could only be initiated if others were willing to co-finance the operations through stocks. As a result, money and stock markets came into existence and capitalism penetrated society.

The increase in trade and commerce, however, did not go together with a substantial rise in welfare, because a substantial part of the extra revenues was used for financing the many wars that divided Europe. These wars caused increasing food prices and great suffering, both in the cities and the rural areas. Also in Geneva, where Calvin was living and working, food was scarce, because of continuous conflicts with the duke of Savoy, who tried to isolate Geneva from the surrounding countryside. Since Geneva provided refuge to many prosecuted Protestants from other parts of the country, the combination of low supply and high demand for food led to high food prices. In many sermons, Calvin refers to this situation of great scarcity in basic goods (Bieler 2005: 127).

The general economic situation and the social imbalance stimulated Calvin and his predecessor Farel to initiate social reforms, such as a general hospital and obligatory primary education. The general hospital provided free medical help to the poor who could not afford a doctor (Bieler 2005: 136). The public schools had to make sure that everybody had the same primary educational opportunities. Deacons had to take care that everybody lacking the basic subsistence means learned an occupation and they also assisted with looking for work opportunities.

Also the type of business that was present in Geneva during the stay of Calvin influenced Calvin's view on the economy. Geneva was a commercial city at the crossroads of many trade routes. Traders were influential members of the Protestant community in Geneva. The openness to new developments and the taste of freedom that went together with trade have influenced the Reformation in Geneva.³

Acceptance of Interest⁴

Along with the development of commerce, the need for opening credits as loans at interest increased. Any large scale industry needed capital and this provided a context for the rise of new financial practices in which some merchants specialized into bankers. The church had not ceased, however, to condemn interest. Also in Geneva, church regulations used to oppose interest, but the practice of lending at interest started to grow, already before the time of the Reformation.

Calvin was the first among Christian theologians who believed that charging interest for lending was legitimate from a moral and theological point of view. He rejected the thesis of Aristotle and the church fathers Ambrose and Chrysostom and the scholastics that money is fruitless ('shutting up money in a box does not produce any yield').⁵ Instead, he stressed that the

productivity of labor is greatly enhanced if it is combined with capital. With the investment loan, the debtor is able to obtain additional income. A trader can, for instance, gain a great amount of money with someone else's money. Hence, it is fair that the lender is compensated. Rewarding the supplier of capital is therefore as natural and fair as paying rent for the use of land or a house.⁶

Calvin showed that the biblical prohibitions of charging interest were irrelevant in this respect. He did so by noting that the vetoes on interest in the classical biblical texts, such as *Ex. 22:25*, *Lev. 25:35-38* and *Deut. 23:19-20* concerned loans to the poor. In most cases, the reason for lending was to provide the poor with means of subsistence in order to survive. These biblical passages can therefore not really be applied to the new financial realities in Calvin's time, because commercial and industrial lending in Calvin's days was meant for financing investments of business enterprises rather than lending to the poor. Whereas consumer lending to the poor yields no extra production to the debtor and therefore does not warrant compensation, the investment loan to companies allows the debtor more profit opportunities.

Thus, Calvin disregards the biblical prohibitions of charging interest. In his view, these laws are political laws that pertain to a political situation that is not existent anymore. If one uses the biblical prohibitions to charge interest for condemning interest in modern economy, one makes the Bible say something it does not say, because it is beyond what the Word of God conveys. Rather, the meaning of the political laws in the Old Testament is to show that justice should prevail and that we should show generosity to the needy. There is a crucial difference between charging interest in business relations and usury. That also explains why the Israelites were allowed to demand interest from foreigners. The texts prohibiting charging interest on loans to the poor call for beneficent help of the poor and for not abusing their situation out of self-interest. According to Calvin, a text like *Luke 6:35* does not condemn interest altogether. Christ did not intend to regulate lending, but rather wanted to fight the natural tendency of human beings to be slow in helping others, because they are accustomed to look at profitable ways of investing their money. Lending unselfishly is one of the marks of Christian charity.

Restrictions on Interest

Calvin's arguments in favor of charging interest demonstrate his understanding of economic facts as well as the freedom with which he interprets Scripture. Taking a stand on the legitimacy of interest should not be motivated by biblical legalism, but by the principle of fairness. But notwithstanding his positive attitude with respect to interest, Calvin developed several exceptions to and restrictions on charging interest. Because he was aware that, although forbidding interest altogether would tie down conscience more rigorously than God did, allowing interest could easily give way to an unbridled license for usury and abuse. In Calvin's view, interest is legitimate, but not always, not from all people and not at all levels.

First, Calvin maintains the biblical prohibition of charging interest to poor people. One should not make abuse of those who are in a situation of utter need through their poverty. A true believer will use his richness to support the poor. Generosity is a matter of justice: we act unjustly if we do not give others what charity demands. In God's eyes, we should also be

beneficent towards the needy, insofar as each can. Calvin bases this human solidarity on the mutual dependency between people. God created man as a community where people need each other. An individual needs others in order to be productive. The Golden Rule from *Luke 6:31* implies that one should help the needy, because if one were needy oneself, one would like to be treated in a similar way.⁷ But if one lends to a rich and well-to-do person, who has an adequate income or wealth, the creditor should receive interest on his loan and should not be condemned.

Second, opportunities for lending money with interest should not block lending for free to the needy. The creditor should not use the argument that free loans provide him with opportunity costs because of the alternative of a more profitable investment. More generally, we should not bypass the duty to exercise charity to the poor, because we can make profitable use of our money by lending with interest. That means that we can only use our money for profit after we have fulfilled our duty to charity.

Third, Calvin applies the Golden Rule in *Luke 6:31* that we should treat others in the way we want to be treated ourselves. The principle of the Golden Rule is equality and reciprocity. This means that loans should not be subjected to conditions that we would not like to accept ourselves if we borrowed from others. Everyone should place himself before the divine Seat of Judgment and therefore do to their neighbors only what they like their neighbor to do to them. In this way, the Golden Rule will serve as an infallible injunction to proper self-discipline, according to Calvin.

Fourth, the loan must enable the borrower to make a higher profit than without the loan. Thus, the extra yield from the use of capital should exceed its costs (interest). If this does not happen, an interest-free loan must be agreed as a form of assistance. In his commentary on Ps. 15:5, Calvin also makes a comment that those who lend at interest are not accomplishing any effort. Therefore, the creditors are not worthy of being rewarded to the same extent or more than those that work hard for it to pay the interest.

Furthermore, Calvin is aware that the influence of interest goes beyond the effects on the benefits and costs of the lender and borrower. It impacts the cost of living and therefore the interests of all consumers. Interest should be at the service of all generally.

Finally, Calvin believes that making a profession of lending money cannot be tolerated. In his commentary on Psalm 15, he states that one very rarely finds a lender who is not a thief. And in his commentary on Ezek. 18:7, Calvin states that whoever makes a profession of putting money out at usury, is a robber. Such a person will certainly commit injustice as if there is no law or mutual love. If a person erects a bank, he is a professional lender. It is unworthy to a Christian and honorable man. Only persons who do not regularly lend money for interest may well receive interest.⁸

Hence, Calvin does condemn excessive interest rates. A number of times, the consistory in Geneva punished businessmen for loans of money that had to be paid back with a substantial high interest rate (Kingdon, 2007). Calvin, however, does not provide an answer to the question what level of interest should be considered proper. As a standard for judging the reasonableness of interest, he again refers to the Golden Rule. Charging interest is legitimate if it is not harming the community and does not violate justice. Nevertheless, since Calvin was aware of the social harm of unlimited interest and the fact that men tend to sin in their economic dealings, he

pleaded for government regulation of the interest rate. He got the authorities in Geneva to maintain a lawful rate of interest at 5% (later 6 2/3 %), a relative low rate for that period (Bieler 2005: 147). This barrier also intended to prevent the appearance of professional lenders, to whom Calvin, as we noted above, was rigidly opposed.

Avarice and Opulence

I will end this section with two other notions that characterize Calvin's view on economy, namely his criticism on the search for richness and excessive consumption. Interest contributes to the income of the creditor. Lending money at excessive rates may indicate avarice. Calvin connects the search for richness to lack of faith in God. Also the apostle Paul equates avarice to idolatry. The fear of misfortune stimulates people to search for richness. But the more they have, the greedier they become. Just as it is the object of drunkards to drink not what may refresh them and meet their natural needs, but to glut themselves with wine, so it is if avarice is dominant in the heart of men. They are seized with a certain kind of fury, like a person who longs for wine without end and without measure.⁹

The alienation from God is not only expressed by avarice, but also by the vice of excessive luxury consumption. A true Christian should be temperate and modest and devote his life to God. In his commentary on *Amos* 6:4, Calvin states that opulence should be condemned, because it always goes together with sinning. We must suppress excessive luxury material wants. The best attitude is to be satisfied with the necessary means of life. That does not mean that Calvin rejected enjoyment of consumption. God's gifts in Creation, such as the color and smell of flowers, serve peoples well-being and are not only meant for providing basic goods.¹⁰ Humans that despise earthly goods alienate from themselves and rob themselves from all feelings.

3. Application to the Credit Crisis

The previous section shows that Calvin was very well able to build bridges between biblical principles and the economy in his times. But do the principles and the restrictions that he developed still hold water for modern economy? In order to research this question, I will focus on the recent credit crisis. Do Calvin's restrictions on interest provide relevant interpretations of what went wrong in the credit crisis?

The Credit Crisis: Main Actors

Before dealing with the question, I will first give a short sketch of the main causes of the credit crisis. Although the credit crisis is a complex phenomenon and still needs a lot of scientific research, we can identify some main actors that have contributed to the crisis.

First, governmental institutions have failed in three respects. First, the US government can be blamed for implicitly subsidizing the credit expansion in the US housing market through the government sponsored enterprises Fannie Mae and Freddie Mac. Risk managers working at Fannie Mae and Freddie Mac have sounded the alarm bells, but under political

pressure, senior management deliberately continued to buy large amounts of Alt-A and subprime loans. The reason was that they wanted to meet certain goals set by the Department of Housing and Urban Development (Calomiris, 2008). By shaping the market for mortgage loans, they have encouraged private investors to enter as well. When interest rates started to rise in 2004, many homeowners were unable to meet the obligations of the bank and consequently the home prices plummeted.

US policy makers also failed in monetary policy. To sustain economic growth, the Federal Reserve systematically lowered the price of money. The resulting excess liquidity was invested in housing, causing the housing bubble.

The third failure concerns the lack of good supervision and regulation of financial markets, both in the US and in other countries. This promoted lax underwriting standards to loan originators and failed to correct the market imperfections in the trade of financial products. Another major shortcoming in regulation concerns the lack of macro prudential supervision on multi-country level. Supervision in Europe as well as on the global level focused too much on individual firms, primarily on banks. Observation of significant risks did not result in appropriate action (De Larosière Group, 2009). Moreover, there were significant differences in the policies of supervisors. Due to severe competition with other countries, supervisors feared that tighter supervision would harm their national competitive position (Tabellini, 2008). A lot of national supervisors were not willing to openly discuss the fragility of their financial institutions.

The second major group of players concerns the commercial banks that sold mortgages to subprime borrowers. They thereby ignored checking the credit history, income and other relevant parameters of borrowers. This behavior was triggered by the fact that these subprime loans were sold in the secondary loan market within a year after origination. The credit risk was thus passed on to the buyers of these secured mortgages (Mian and Sufi, 2008).

The third major group that has contributed to the credit crisis consists of investment banks that have transformed the mortgages into mortgage backed securities and collateralized debt obligations. As such, these new innovative instruments to share risk can be beneficial. On the other hand, because of the complexity of these financial products, they also create more opportunities for asymmetric information that is used to hide risks at the detriment of the buyers of these products.

This leads us to the fourth major actor, the credit rating agencies. Competition between rating agencies through rating shopping resulted in rating inflation. Empirical evidence suggests that the more complex the security, the higher the rating bias produced by rating agencies (Skreta and Veldkamp, 2009).

The fifth type of player concerns the buyers of derivatives. They failed to use appropriate risk models and took too much risk in their portfolios (Bervas, 2006). Their appetite for risk was encouraged by excessive bonus systems for investment managers that stimulated a short-term focus on profitability.

Finally, one can say that the strong focus on short-term profitability was also induced by the short-time horizon of shareholders of banks. The average holding period for stocks

until the mid-1960s was about seven years. Today it is less than a year in professionally managed funds (Rappaport, 2005). Aggressive shareholders like hedge funds prompted banks to a short-term focus on maximizing stock value.

First Restriction: Do Not Charge Interest to the Poor

What can Calvin's restrictions on charging interest learn us about the credit crisis? When considering Calvin's first restriction that one should not charge interest to the poor, the linkage with the credit crisis is that the subprime mortgages mostly concerned relatively poor persons. Calvin's guideline demands free loans to the poor. One can indeed question whether subprime mortgages are apt to provide finance for housing of people with low purchasing power, because of the risk that interest rates may rise and house prices will not continue to rise. Although the goal of enabling poor people to own their own house is socially desirable, one can doubt whether market products can effectively be used to attain this goal.

Recent experience with the so-called Bottom of the Pyramid approach seems to suggest that this is indeed possible (Prahalad, 2006). The core idea of the Bottom of the Pyramid (BOP) approach is that large companies develop new commercial products that are targeted at the needs of the poor and contribute to the fight against poverty. The approach is market based and does not depend on government assistance, since it is believed that companies can make a profit by serving the mass of poor people. According to Prahalad, poverty reduction can result from co-creating a market around the needs of the poor. In this view, innovation in financial services (like microfinance) is much more effective in reducing poverty than development assistance. Innovation thus provides the basis for a profitable win-win engagement of companies in solving social problems. Treating the poor as normal consumers, according to this view, does not only provide them with products and services at a reasonable price, but also provides respect, fair treatment and self-esteem.

In a way, offering mortgages to low income groups is an application of this idea. Financial companies offering subprime mortgages to poor families made a nice profit, whereas many poor families got access to the financial means they needed for buying themselves a house. Furthermore, innovation in financial products allowed the sharing of the risks involved with these subprime mortgages to be re-allocated to other financial parties all over the world. However, this kind of win-win opportunities did not prove to be sustainable, because in the end, market products can only be sold to customers with appropriate purchasing power market. The fact that initially the market strategy seemed to succeed was only due to market imperfections that hindered a transparent transmission of information of the risks involved with the mortgages as well as to temporarily favorable market developments that reduced interest rates on mortgages while raising the price of houses. But when interest rates increased, many poor families were confronted with an interest burden that was too high and with housing market prices that were plummeting, thereby demolishing the profits that the win-win strategies promised. In the case of the housing market in the US, market instruments therefore proved to be incapable to solve the social problem of providing poor families with housing. In the end, the new financial tools turned out to do great harm to the overall economy

and the housing market in the US particularly.

Therefore, it seems that Calvin's restriction not to charge interest from the poor is still relevant in modern economy. There are two ways to apply this restriction in current economic reality. One way is that investors take up ways of social responsibility that do not necessarily serve profit maximization. For example, by willingly investing in funds that are targeted at social goals, such as micro credit funds, but that yield less profit than commercial lending. A second way of applying this restriction results from Calvin's plea for public hospitals and public schools. In that case, one acknowledges that meeting the housing needs of the poor on a large scale cannot be attained without some kind of government assistance. In the case of housing policy, subsidies or other types of government assistance and state assurances could help people with low purchasing power to earn a living of their own. An interesting application is the proposal of Martin Feldstein to restructure the subprime mortgages by offering homeowners the opportunity to replace 20% of the mortgage with a loan from the government for an amortization period of 30 years at an interest rate of only 2%, subject to a maximum of \$ 80.000 (Ferguson, 2009). If this kind of measures was put in place before the credit crisis started, it could have rescued many poor homeowners from forced sale of their house and have prevented the massive decline in the housing market that we have witnessed during the credit crisis.

Second Restriction: Do Not Neglect Your Duty to Charity

The second restriction holds that business investments should not crowd out charity. This restriction is very much related to the first restriction. Demanding no (or less) interest from poor people than from other people in order to help them achieve a living income is a way of charity as understood by Calvin. The principle therefore calls investors to continue also their socially responsible investments even if there are currently in a market with rising stock values opportunities for more profitable investments. According to Calvin, a person who exploits some money that he should have allotted to help someone is degrading himself to the rank of a usurer (Bieler, 2005).

Also for companies, it is very tempting to reduce the support to social projects now profits have vanished and the continuity of the company is at stake. Many companies are following a strategy of cost reduction in order to secure the continuity of the company. There is a strong focus on cutting all costs that do not serve the core business of the company. Charity is clearly one of the easy targets. However, in Calvin's view, a businessman should always consider the deeper meaning of doing business, which is to serve God and his fellow human beings. Therefore, budgets aiming at supporting the needy should have high priority and although severe market circumstances may force companies to temporarily reduce these budgets, they may only do so with the intention that continuing their business will also enable them to take responsibility for the needy once again.

This is particularly relevant for charity to funds directed to poverty reduction in developing countries. This also holds for governments who are facing the challenge of stimulating their own economy while trying to prevent government debt from souring. In this situation, it might be very tempting to reduce the support to developing countries. In the

Netherlands, for example, all public expenditures are maintained in order to stimulate the economy except one category, namely development aid. This is the result of a budget rule that links development aid directly to national income (which has declined by about 5%). However, the credit crisis particularly hits the developing countries. According to the World Bank (2009), the financial situation in developing countries is rapidly worsening due to a substantial decline in their export and in foreign investments. Also revenues from migrants working in other countries are plummeting, because of rising unemployment in the US, Europe and Asia. This particularly hits migrants, because they are dismissed first before the incumbent employees lose their job. Since the economic recession in developing countries poses a much more serious threat to meeting basic human needs than the recession in developed countries, governments should give high priority to maintaining their support to developing countries.

Third Restriction: Respect Reciprocity

Also respect of reciprocity as reflected by the Golden Rule – Calvin’s third restriction - has relevant implications for the credit crisis, because banks have neglected this principle in several stakeholder relations.

First, lack of reciprocity is shown by the commercial banks that sold mortgages to subprime borrowers and pooled them in collateralized loan obligations to be sold to institutional investors in the secondary loan market. By disregarding underwriting standards like, for instance a 20% down payment, a check of credit history or height of salary, they harmed the interests of those to whom the mortgages were eventually sold. Furthermore, in the process of repackaging mortgage loans through securitization, information on risks was deliberately hidden and consequently investors were not sufficiently aware of the probability of default. It is obvious that this way of dealing with trading partners violates the principle of reciprocity. If these banks themselves invest in financial assets, they also want to be well informed about the risks involved with the assets. The Golden Rule then demands that one should deal in a similar way with one’s trading partners.

A similar criticism holds for credit agencies. By deliberately providing too high ratings to attract as much customers as possible, they did not respect the autonomy of their investors. If they sat in the seat of these investors who trusted the judgment of rating agencies when buying these complex derivatives, they themselves would also have wanted fair judgments, particular because that is exactly what the job of rating agencies is about. From an impartial point of view, professionals should act in accordance with the professional standards for the task that they are assigned to in order to secure a good operation of the market.

A third example of lack of reciprocity concerns the relationship between banks and depositors. If the asset managers invest in the complex financial products without understanding the risk profile of these products, they play with other people’s money. This violates the principle of reciprocity. If they had placed themselves in the shoes of depositors that trusted their money to the bank, they would also have preferred a less risky investment policy. This also applies to institutional investors like pension funds to which employees trusted their pensions.

Also in the relationship with creditors, banks have transgressed the principle of

reciprocity. When banks provide credit to companies, they normally demand guarantees in terms of minimum solvability and liquidity rates. The credit crisis has made apparent, however, that the solvability of banks itself was extremely low (in some cases even lower than 5%), just in order to increase leverage and therefore the profitability on their own equity. Because of this small buffer, banks got into severe liquidity problems once the interbank lending collapsed as a result of increasing distrust among banks. As a result, banks were not able anymore to provide their clients with credit and this caused a major impediment to investments by the business sector. Again, if banks had looked at themselves through the eyes of their clients, they would also have wanted higher rates of solvability and liquidity in order to be able to continue their function as financial mediators.

A fifth example of lack of reciprocity is the high bonuses received by asset managers. Reciprocity demands that a bonus reflects the value added of asset managers for the company, its stakeholders and for society at large. During the credit crisis, the value added to the (short-term) investment policies of these asset managers has been negative in a devastating degree. Even so, many managers continued to claim a bonus. Only after strong social pressure, some of them (like managers of AIG) moderated their claims. Also the high level of the bonuses that asset managers receive seems to indicate that they have lost contact with reality. If they looked at their own position from the perspective of shareholders (who faced a decline in stock values of more than 50%), they would realize that such high bonuses are unfair, because the only loss that these managers face when failing in the way they did, is the loss of a bonus and not the loss of a major part of their financial wealth.

Taking this point to a more general level, bank managers seem also not aware of the lack of reciprocity exhibited by the shifting of harm caused by the credit crisis to society at large. Because of the Keynesian policies of many governments to fight the recession caused by the credit crisis, government debt is surging and this generates a high burden for the future to be paid by all citizens. But this being the case, even now it seems that asset managers continue to act as they did before the crisis.

From all these examples one can conclude that when market parties in the financial sector develop a narrow focus on short-term profits or self interests, they tend to treat their stakeholders merely as instruments for maximizing their own financial rewards. This results in a lack of respect of stakeholders and a breach of the principle of reciprocity. Because if they placed themselves in the position of the stakeholders (shareholders, depositors, other clients and society at large), they would probably also not have wanted to be treated merely as means for the greed of bank managers.

Fourth Restriction: Let the Borrower Make As Much Or More Profit from the Borrowed Money

The fourth restriction of Calvin cannot be guaranteed in every case, because that would require that the creditor fully partakes in the risks of the debtor (as in some forms of Islamic banking). But on a macro level, neoclassical theory predicts that in the long run, the free market operation on the capital market will secure the condition to be fulfilled, since interest rates adapt to the demand and supply of credit. For an investment project to be profitable, its return (the revenue

from increased future production of goods and services) must exceed its costs (the payment for borrowed funds). If the interest rate rises, fewer investment projects are profitable and the quantity of investment goods falls. If the market for loans is in equilibrium, the interest rate equals the investment return of the investment project that is least profitable of all investment projects that are financed by loans. Therefore, according to neoclassical theory, the return on investments will normally exceed the costs of interest payment and therefore Calvin's fourth restriction will in most cases hold in the longer run.

Still, one can doubt whether this neoclassical argument also convinces in the case of the credit crisis. From the literature on bounded rationality we know that individuals may not be as rational as is assumed by neo-classical theory (Conlisk, 1996; Rabin, 1998). People often lack the cognitive ability to form rational expectations, particularly in choice sets that require intertemporal trade-offs (like in the case of mortgages). This may particularly be true for low income groups. Because these groups have limited capacity to oversee the consequences of buying a house, banks have a duty to take special care to ensure that the house owners' interests are not harmed (Velasquez, 1998). It is often only the bank who can fairly be said to know and understand when a mortgage is a suitable product that house owners can afford. But mortgage banks did not take up this responsibility and did not screen house owners with respect to their ability to finance their mortgage in case of changing market conditions. At the contrary, motivated by short-term profits, they tried to sell as much as possible mortgages at conditions that are favorable in the short run (i.e. short-term interest rates and rising housing prices). As long as these favorable short-term conditions were fulfilled, Calvin's fourth condition was met since the subprime mortgages allowed debtors to benefit from the value increase in houses. But this situation proved to be unsustainable. When interest rates started to rise, house owners found that they were not capable anymore to pay the interest burden and were forced to give up their house. As a result, house prices went down and so the benefits of homeowners became negative.

Still, this is not the full story. Because a peculiar aspect of the mortgage market in the US is that house owners can fairly easily get rid of their mortgage, simply by handing the key over into the hands of the mortgage bank. Consequently, house owners who were forced to sell their house did not incur a substantial wealth loss as a result of a decline in the price of their house. All risks involved with falling house prices were shifted to the owners of the derivatives of mortgages. Hence, the final harm to the wealth of house owners remained rather limited in comparison to the financial harm to investors that invested in the mortgage based derivatives. In a way, therefore, the fourth condition of Calvin was still met: the losses of the borrowers (house owners) were lower than the losses of the lenders (investors in derivatives).

Fifth Condition: Also Consider What Is Expedient for the Public at Large

It is not difficult to see the relevance of the fifth condition that one should take into account the indirect effects of interest on society at large. This condition anticipates the current theme of corporate social responsibility. According to the Social Economic Council (2001), CSR incorporates two elements:

1 Sufficient focus by the enterprise on its contribution to public prosperity in the longer run

2 The relationship with its stakeholders and society at large

Both elements fit the essence of this fifth condition of Calvin, namely that lenders should take into account the wider welfare effects of their dealings on society at large. CSR means that business should create value in three societal dimensions, namely: economic (through the production of goods and services and through the creation of employment and sources of income); social (a variety of aspects concerning the effects for human beings, inside and outside the organization, like good labor relations, safety etc.); and ecological (the effects on the natural environment). According to the EU (2006), banks have increasingly taken steps to integrate social and ecological values in their policies and developed instruments to communicate their CSR performance to its stakeholders by social reporting. But the credit crisis shows that many of them have neglected their core economic responsibilities. As a result of the excessive risks in investment policies and the resulting collapse in trust among banks, the intermediary function of financial institutions halted and some banks went bankrupt. Moreover, as particularly large banks had reached beyond their traditional activities and included other services (insurance, private banking) in recent years, these banks became more homogeneous and so did their risk profile. As a result of this rapid diversification, the stability of the banking sector deteriorated, creating substantial systemic risks to the banking sector as a whole (Wagner, 2008).

This has had an enormous impact on the interests of various stakeholders and on society at large. First, shareholders saw the value of their stocks in financials plummet. According to Alan Greenspan, self-interest on the free market failed to stimulate banks to an investment policy that serves shareholders interests. Literally he said: “I made a mistake in presuming that the self-interests of organizations, specifically banks and others, were such that they were best capable of protecting their own shareholders and their equity in firms.” (NRC, 10/30/2008, p. 7). But CSR goes well beyond the protection of shareholder interests and also includes the interests of other stakeholders, such as clients of banks, employees and society at large. Among the clients that were severely harmed are companies who were confronted with a drastic reduction in credit facilities, causing major liquidity problems. Furthermore, deposit holders were facing high risks because of the danger of bankruptcy of banks. It is only due to intensive government intervention that the number of collapsing banks remained limited.¹¹ Furthermore, many banks fired employees in order to reduce costs, thereby severely harming the interests of their employees. Finally, as the crisis unfolded to other sectors, firms in other sectors were confronted with a dramatic fall in the demand of goods and services, which resulted in the layoffs of many employees as well. Government budget deficits surged, creating a high burden on future tax payers, whereas pension schemes faced a huge decline in covering rates, forcing pension funds to raise pension premiums or to reduce pension benefits.

Sixth Condition: Do Not Make a Full Profession of Your Banking

Finally, although Calvin’s opposition to professional bankers seems outdated in modern

economy, his warning for the moral dangers of professional banking also holds water in the current crisis. In particular, one of the causes of the appetite for risk in the investment behavior of banks is the strong focus on short-term gains in wealth. Here Calvin's analysis of avarice is particularly telling, because the exorbitant bonuses seem to have obscured the bank investors' ability of sound risk judgment. There is empirical evidence that a long-time horizon contributes to long-term profitability (Richardson and Waagelein, 2002; Keil et al, 2001). But companies are either unwilling or unable to make investments that are necessary for the future, but that require a sacrifice of short-term profits. A very often mentioned reason for this is pressure from the stock market (Segelod, 2000). Also compensation of executives not based on the long-term performance of the company will ultimately lead to decisions that are detrimental to shareholder wealth (Vogel and Lobo, 2002).

Furthermore, the literature on intrinsic motivation provides considerable empirical evidence that price incentives crowd out generosity (Frey and Jegen, 2001). The undermining effect is maintained, even if the monetary incentive is stopped (Gneezy and Rustichini, 2000). Paying excessive bonuses may therefore have crowded out intrinsic professional values that are traditionally considered of utmost importance for the banking sector, such as reliability, justice, accountability and servitude to clients. As stated by the Advisory Committee Future Banks (2009: 7): 'The credit crisis has cast doubt on the ethical and moral attitudes and behaviors of bankers. This has been encouraged by the high variable rewards (bonuses) that were received (and still are received) by bankers' (Advisory Committee Future Banks, 2009).

Calvin's suspicion that making money with money may be detriment to virtues that are needed in banking should therefore still be taken seriously. Although the need for a change in business culture is widely acknowledged, the signs of an emerging new culture in the financial sector are not unambiguously positive. As noticed above, banking managers are still inclined to continue the bonus systems that used to apply in the pre-crisis period. The societal protests and the apparent lack of justice of these reward systems does not seem to bother them. This once again illustrates Calvin's point that working with money may make people insensitive to moral claims. I can think of three reasons why this culture is highly persistent. First, as capitalism legitimizes well-understood interests, bankers may reason that others would also not refuse high rewards if their company offered these to them. A second reason is habit formation. Many economic researches show that people get used to high levels of rewards (Clark, 1999). A third reason is social interaction in peer groups. There is a lot of research that shows that the satisfaction derived from income depends on its relative level (Solnick and Hemenway, 1998; Brekke and Howarth, 2002). The satisfaction that bank managers get from their reward is therefore also probably related to their relative bonus in comparison to the bonus of other bank managers. A bank manager will relate the reasonableness of his reward to the reward of his colleagues. He or she is therefore not sensitive to claims of people working in other sectors of economy saying that rewards of bankers as a group are not in proportion to the value added they create to society. This blocks self-criticism derived from the spectatorship as described by Adam Smith in his Theory of Moral Sentiment.

Temperance

Modesty and temperance are not only relevant virtues for bankers, but apply to other people as well. A final application of Calvin's social and economic thought to the credit crisis that I therefore want to mention is the virtue of temperance. The credit crisis has been so influential partly because of the vulnerable financial situation in the US. Both on the micro and the government level, debt has substantially increased. Total private and public debt rose from 155 % of GDP in the early eighties to 342 % of GDP in mid 2008 (Ferguson, 2009). Taking into account that the US is one of the richest countries, this indicates that the American lifestyle is extremely materialistic and can be characterized as overconsumption. According to Moore (2005), this tendency to excessive consumption is an inherent part of the current Anglo-American version of capitalism. Because of this huge debt, the buffer capacity for absorbing the reduction in wealth caused by the decline in housing market prices has been very small. This has crowded out the market's trust in government policy and is one of the reasons why the credit crisis has hit so hard as it has done till now.

4. Lessons For Future Policies

In the previous section, we found that all restrictions on the practice of banking that Calvin proposed yield insight into various moral problems that became apparent during the credit crisis. In this final section, we will shortly indicate some lessons that banks and governments can learn from these restrictions in fighting the crisis or preventing it from reoccurring in the future.

Bank Policies

The main lesson that banks can learn from the restrictions that Calvin proposed is that they should not only focus on serving their own interests and those of short-term oriented stockholders, but also consider the interests of other stakeholders like trading partners, clients, deposit holders, employees and society at large. If banks reciprocate the value added that these stakeholders provide to the banks, chances that trust will break down and banks get into a crisis will substantially decline. In this way, banks will not only meet the third and fifth restriction discussed in section 3, but also show that Calvin's sixth restriction may be too stringent by proving that full time banking does not corrupt the bankers' morality.

This shift requires that banks reduce the degree of risk taking. This can be done in several ways, such as a reduction in leverage (an increase in solvability), a more careful investment policy (based on a thorough understanding of the risks of the investment assets) and a return to the core business that matches the bank's expertise. Only activities that provide clear synergies should be taken up in order to maintain sufficient control.

The reorientation from narrow short-term self-interest towards stakeholder interests also demands innovations in the governance of the bank at various levels (Advisory Committee Future Banks, 2009). The board of supervisory directors should be aware and committed to the societal role of banks in order to judge the bank's operations from a broader view that balances

the interests of various stakeholders. This requires that the boards of supervisory directors are sufficiently qualified to be able to independently judge the risks of their banking policies. The risk policy of the bank should regularly be explicitly discussed by the board of supervisory directors.

Similar implications apply to the board of managing directors. Banks could, for example, introduce declarations to be signed by managing directors and relevant employees of these banks that demand commitment to a responsible stakeholder policy. In balancing the interests of shareholders, clients, depositors, employees and society at large, the board of managing directors should give priority to the interests of clients and depositors. If these interests are secure, banks will more effectively serve society. And chances are high that the bank will then also be financially successful and be able to meet its responsibility towards its shareholders. The resulting financial stability will also enable banks to meet their social responsibility to disadvantaged groups, thereby meeting Calvin's first and second restrictions concerning charity to the poor.

The board of supervisory directors and the board of managing directors should also take up the responsibility to moderate the bonuses of bank managers. Particularly CEO's could have an important influence on the business culture by setting an example by showing temperance with regard to their own income. Furthermore, total income of bank managers (i.e. base salary, bonus, stock options and exit rewards) should be proportional to the value added of the banks in the long run and should be reasonable when compared to the income of other bank employees and employees in other sectors of economy. The income of bank managers should not depend merely on financial parameters, but also include non-financial parameters relating to client satisfaction, integrity, compliance to legal provisions and sustainability.

Finally, by pursuing a long-term strategy of profit maximization, banks will also be able to attract shareholders with a long-term horizon. The commitment of shareholders towards a long-term horizon can be further enhanced by rewarding stable stockholders with a loyalty dividend or enhanced voting rights.

Government Policies

Although Calvin put considerable stress on the social responsibility of businessmen, he also called for state intervention if people do not live up to their duties. Improvidence, greed or lack of self-restraint threaten the wealth of others. Since these sins corrupt social relations, the state is entrusted the responsibility to establish rules that safeguard that economic agents do not harm each other and that honesty and modesty be preserved among them. An example is Calvin's support of the regulation of the interest rate in Geneva.

In light of the restrictions that Calvin proposed on capital market transactions and given the problems that became apparent during the credit crisis, government regulation is also warranted in the current economic context, although of a different kind that Calvin proposed. First, there are several measures governments could take that are complementary to the policy changes by banks discussed above. For example, legal provisions could be established that guarantee the supervisory directors' ability (such as obligatory tests of expertise and experience

and, if necessary, further training of existing directors). Furthermore, in order to raise solvability, governments can raise minimum solvability requirements for banks (putting a maximum to their leverage ratio) and demand that risky assets remain on their balance sheet. Furthermore, if banks are not willing to take up responsibility for moderating the bonuses of bank managers, governments should internationally cooperate in order to put effective restrictions on the level of such bonuses. Obviously, this kind of price ceilings are not first best options (as a maximum interest rate that Calvin proposed is neither), but in order to prevent the social harm that exorbitant bonuses produce (restriction 5) as well as to do justice to the principle of reciprocity (restriction 3), governments cannot remain inactive if banks are reluctant to take the necessary steps.

Furthermore, governments should learn from the mistakes in the regulation policies of the US government and other governments. Housing market regulation should protect house owners against bounded rationality. In case of low income groups, governments should carefully select measures that provide assistance in a more sustainable way and not be too optimistic that market solutions alone will be sufficient to solve poverty. Policy makers should therefore be prepared to support initiatives by collective expenditures (restriction 1).

Also the regulation of the financial sector should be improved to prevent negative externalities of banking on other sectors of economy (restriction 5). Various national and multinational committees have done proposals in this regard (Eijffinger, 2009). For example, for improving supervision at the European level, De Larosière Group (2009) proposed the founding of a European Systemic Risk Council with the task to pool and analyze all risks that might impact financial stability. An effective early warning system should be imposed, so that if turmoil in financial markets threatens, actions will be taken. On top of that, De Larosière Group proposed a new body for supervision at the micro level, the so-called European System of Financial Supervision, that would be responsible for the supervision of banks, insurance companies and stock markets at the national level. It is, however, beyond the scope of this article to discuss the detailed measures that should be taken in this field.

Furthermore, the credit crisis has confirmed Keynes' view that there is a potential large role for the government to stabilize the economy. Many governments have indeed pursued an expansionary policy and probably rightly so. Such policies do not only stimulate their own economy, but also have a positive indirect influence on the economies in developing countries. But one wonders how expansionary policy that aims at growth relates to Calvin's plea for modesty. As a minimum, temperance implies that policies should also be anti-cyclical when the economy starts growing again. This implies that particularly US government should take care to reduce government deficits as soon as the signs of recovering are strong enough. Furthermore, the principle of temperance also implies that governments reduce policies that stimulate high leverage financing by other market parties. In the case of the Netherlands, an example is the deductibility of mortgage interest, which provides households with a strong incentive to accept a maximum of debt to finance their houses.

Finally, stabilizing the government budget is also important in regard to Calvin's second restriction that one should not neglect the needs of the poor, even if one can make a high return on investment. If governments run into severe deficits, it is more difficult to maintain their

commitment to supporting the needy.

Balancing Private and Public Responsibilities

Obviously, regulation may not overrule the own responsibility of banks, but must rather aim to enforce it. It is beyond the power of governments to ensure that banks succeed in properly balancing the interests of all stakeholders involved. Nevertheless, as already stressed by Aristotle, good laws and regulation can substantially contribute to enforce virtuous patterns of behavior (Graafland, 2009). According to Aristotle, virtues arise as a result of habit: we become just by doing just actions, temperate by doing temperate actions, brave by doing brave actions. Hence, we must display the right activities, because differences in these imply corresponding differences in the qualities of character. Although obeying the law may be initially motivated by extrinsic gains (such as the prevention of fines), extrinsic motives may slowly crowd in and become internalized in the attitudes of individuals when they get used to the actions that the law demands. Thus, when, for example, rating agencies are under a stricter control system that demands sound ratings and start to behave accordingly, this will change the professional standards in their companies and this will, in the end, also affect their business culture. Although the motive may initially be extrinsic – to maintain their license – the behavioral pattern will crowd in into the genes of the organization and its members and foster a good will to perform honestly and this will foster trust in the market.

On the other hand, overregulation may also crowd out the responsibility of banks. Instead of increasing regulation, the focus should therefore be on making regulation more effective without making it more burdensome, for example by shifting its focus from a national to an international level. Too much regulation will not only prove rather costly to society, but, from a moral point of view, also runs the risk of lack of respect of the freedom of private firms. Leaving too little responsibility may be detrimental to the development of intrinsic motivations of banks to honesty, temperance and prudence. One must allow financial companies to learn from the crisis. We all are aware now that banks can go bankrupt and this will have a decisive impact on the collective memory for the next decade. I therefore expect that banks will adjust their balances voluntarily and this may prove to be much more important than government regulation. Governments should not frustrate this process by too much regulation.

Concluding Remark

There are currently various trends that confirm that the banking sector and governments develop policies that are in line with the lessons that we can learn from Calvin's restrictions on interest, as discussed above. Banks divest activities that do not belong to their core business. Many companies are raising their solvability and reduce the risk profile of their investment policies. Some CEO's have taken the lead by willingly reducing their salary and abstaining from a bonus as long as their company is not profitable.

At the same time, governments are seriously considering policies that enforce these

changes and have reconsidered the importance of government regulation as a way of dealing with inefficient and sinful structures in the private sector. All of these seem to confirm that Calvin was a theologian who deserves not only to be commemorated for his work in theological dogma, but also for his ability to translate principles of Christian ethics to daily economic practice.

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¹ See, for example, Tawney's foreword in Weber's book. Weber himself was also aware that his thesis relates to later Calvinist thought rather than to Calvin's own social economic views.

² Even nowadays, Calvin's acceptance of interest seems to have an influence with respect to creditor rights. Stulz and Williamson (2003), for example, find that Catholic countries protect the rights of creditors less well than Protestant countries.

³ Geneva also harbored several leading professional printers. This has contributed to the international spread of the Calvinist Reformation all over the world.

⁴ The main sources of Calvin's view on interest are Calvin's commentary on Ex. 22:25, Lev. 25, Deut. 23, Ps. 15:5, Ezek. 18:8, Matt. 5:42 and Luke 6:34 and a letter sent to his friend Claude de Sachin. See also section V.6 of Bieler (2005).

⁵ Also the other Reformers, such as Luther, Melancthon, Bullinger, Zwingli and Bucer, remained faithful to the medieval tradition in this point. Only at the end of his life, Luther came to accept interest and only regarded too high a rate of interest as usury (Bieler, 2005).

⁶ Another instance in which taking interest is legitimate according to Calvin is if through ill intent the borrower does not repay at the fixed term. This kind of exceptions was also allowed in Catholic practice. The lender was authorized to claim from the borrower an indemnity called *interesse* when the loan caused him real damage or if he deprived real profit by missing other business opportunities or if the loan involved a certain risk.

⁷ Sermon XCV about *Deuteronomium* 15:11-15

⁸ Furthermore, Calvin added that we must not consider what is allowable in terms of received custom, nor assess what is right and fair by the standards of the world, but use the Word of God as a precept (Stückelberger 2007). This also holds for existing laws: Christians cannot be content with the minimum order that the law wants to secure, but should rather obey the standards that are determined by their faith in Christ and the love that flows from it. Thus, there is no formal rule of law that enables us to distinguish between legitimate lending and illegitimate usury. The sole rule is the rule of fairness and Jesus Christ's Judgement.

⁹ Commentary on Habakkuk 2: 15.

¹⁰ *Institutes* (1560), III, x,1, section 2.

¹¹ But even government intervention aimed at reducing the risks of bank failure for the real economy had a perverse effect by providing banks even more playing room for risk taking policies.