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Horizontal Development of Science

Can Financial Dogma be Sustained?

Summary: Rethinking economics is unavoidable. There is no value-free economics. It is necessary to create more practical curricula when teaching economics. Economics is not a vertical, but a horizontal science. There is not only one model, there are different models. It is important to include the functioning of monetary institutions in the economic models to be able explain the economic crises. Rethinking monetary rules is important. Modern money creation causes credit boom, income inequalities and financialisation. Banks are not financing real investments. Credit is given to finance consumption which leads to debt slavery. Central bank independence was not enough to stop the crises in the economy. Both money creation by the government and by the banking system may cause crises. We can only choose between two bad options. It is necessary to reinvent ancient morals and make economics more ethical.

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The media reported on the revolt of economics students in London. Similarly to *Luther*, the students pinned a manifesto to the entrance of LSE on 12 December 2017, demanding more practical economics education (New Weather Institute, 2017*).* The students were concerned that economics had become detached from reality. Modern economics describes a parallel universe which has nothing to do with real circumstances. It was not the first time such an action had been taken. Similar demands had existed for a long while. However, the 2008 crisis gave this process a boost. What students found the most outrageous was the fact the university curricula had not been significantly changed after the crisis. In their view there are three main reasons for this.

❶ First, within economics, an unhealthy intellectual monopoly has developed. Many other perspectives outside of the neoclassical approach have become marginalised.

❷ Second, while neoclassical economics made a contribution historically and is still useful, there is ample opportunity for learning from other disciplines.

❸ Third, mainstream economics appears to have become incapable of self-correction, though better economics is indeed possible.

Not only students, but several academics joined the movement, as well. *Rethinking economy,* the reconsideration of economics is

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widely supported. Perhaps the most striking fact is that not only students and university professors, but also their potential employers criticised the quality of education. According to company directors, despite having technical skills, fresh graduates have no idea about the real environment in which they could or should use their knowledge. (If they had to use their *existing knowledge* at all.) In England, the Bank of England and government employers (!) also joined those who thought that the arising criticism was well-founded. Why is it that economics is unable to answer the question as to why wealth and income in the economy are getting more polarised between the 1 percent and the 99 percent? Why has it been getting harder for people to get by (in the US for more than 30 years) in spite of increasing productivity? The questions above are not only relevant in the United States or in the British Isles, but also on the European continent or in other geographical areas (Piketty, 2015).

THE PURPOSE OF ECONOMICS

Without listing the 33 theses, we highlight only their most important message: we should define the purpose of economics. Practically, its aim is to achieve common good. Society should define what common good is. Based on the fundamental thesis of the "rebels", economics is a science that is not free from values and politics. Indicators of success always represent political choices. Values cannot be disguised as neutrality... At the same time, the teaching if economics has always been ideologised. *Veblen* already stated (M. Hudson, 2017) that in American higher education business interests had required economics to prove the existence of the *trickle down economy.* In light of the above, the increase of the wealth of the rich is in the interest of society as a whole, as wealth "trickles down" to poorer strata, creating jobs for poorer people.

Redistribution could solve the problem of social inequality (see: the so-called Swedish model). On the other hand, according to the currently prevailing economic approach (based on *Hayek*'s view), each measure to increase the role of the state leads directly to servitude. Based on the above, the theses seek to pluralise economics and claim that economists need to be well versed in ethics and politics. In addition to the mathematical models, students need to explore other methodological approaches from different areas of science. Above all, economics must do more to encourage critical thinking and students must be able to compare theories and critically apply them to the real world.

Dani Rodrik, a very active economist of today's academic scene, dedicated a book to studying economics, entitled *Economics rules* (Rodrik, 2016). He belongs to those who attempt to handle the current torrent of criticism in a constructive manner. According to Rodrik, those who do not create models and do not defend the truth of such models by any means necessary are not real economists. In his book, Rodrik remonstrates that it is a mistake to always try to find a single model based on the fundamental laws of nature that underpins economics. We cannot talk about "the model". There are several models whose validity depend on the system of conditions. However, within this system, they lead to relevant and practically interpretable results. According to Rodrik, economics as a social science fundamentally differs from other disciplines which explore truths in the field of natural sciences. Consequently, economics as a science advances horizontally rather than vertically. Instead of being based on and deepening previous knowledge, new findings horizontally widen it within a system of changing

conditions. At the same time, Rodrik stresses that logical thinking can only benefit from mathematical exactness. The only characteristic we need is flexibility if we want to use models which meet the criteria.

HYPOTHESES

Mainstream models contain several unrealistic hypotheses, one of them being voluntary unemployment. For example, the labour force does not enter the labour market below a certain wage level, but becomes voluntarily unemployed instead. One may ask: how can people afford this? What will they live on? Possible answers include: from their savings, they are supported by their family members or from state benefits. It is undeniable that where the current welfare network provides livelihood even without working, people hardly look for jobs below this income level. However, such economies are not genuine free markets. These days every developed country provides a certain amount of state benefits to the unemployed... However, the high number of young unemployed people should not be overlooked. Youth unemployment can reach up to 25 percent in the Mediterranean countries. As for youth unemployment, its level is threatening in the United State, as well. Despite the fact that young people look for work, there are no vacancies. Due to prolonged education, parents have to provide for their children for a long time, often even after their children could enter the labour market, since they are unable to find work. It cannot really be called voluntary unemployment.

Furthermore, as we learnt, inflation results in increasing employment. At the same time, the Phillips curve has not been suitable for describing the modern economy since the 1970s, as there has been stagflation, high inflation and high unemployment. Nowadays, exactly the opposite is true: there has been / is growth even along with a record low level of inflation. On the other hand, the following question can be raised: who benefits from economic growth? Cui prodest? In fact, only a few can experience the economic growth, as income generation is very concentrated, which is hidden by the averages. Connections are more complicated than the simplified models.

Nor does the Laffer curve prove true in modern economy. Higher taxes do not result in decreasing tax revenues in each case. Nor is the opposite true: tax reduction does not necessarily increase revenue. For example, *Reagan's* radical tax reduction led to a huge deficit. In the end, taxes had to be raised again. Based on the above, many of the laws students are taught do not apply anymore. Crucially, the system of financial institutions is not integrated into the models.

THE INTERNALISATION OF THE FINANCIAL SYSTEM

No wonder that experts are unable to explain the reasons of the economic crisis and offer a solution for its prevention, as they do not study the system of financial institutions in their models. Yet, the roots of the crisis were and still are to be found in the operation of the financial system. One of the biggest shortcomings of modern economic theories is that they do not integrate the system of financial institutions into the models.

If we want to understand why economics should be taught in a different way than before, we need to examine the laws of finance, in particular modern money creation (for further information on the topic see: Botos, 2017).

In our time, finance is separated from economics. On the other hand, when discussing the logical model of banking operations,

finance usually focuses on lending to enterprises in the real economy. In the light of the above, the bank serves the real economy, acts as a money broker and finances good business ideas. In addition, the bank transforms savings into investments, which is its useful function. This is what we learnt and what we taught. At the same time, the real economy is able to generate the interests which are to be paid, as enterprises create new values. Consequently, as a result of "brokerage", there is enough and to spare. Producers benefit from this system, because they can realise their dreams, but the financier also acquires a share... In the 19th century, the sophistication of the English banking system played a role in economic growth as important as technological progress (Turner, 2016). According to *Alexander Gerschenkron,* quoted by *Turner*, investment banks played a similar role in Germany, as well. Beyond doubt, banks and the banking system were very useful. In several places, for example in the agricultural regions of India, the development of the banking sector would still significantly contribute to economic boost (Turner, 2016).

It is very important to note that despite referring to the banking system in connection with money creation, the financial sector as a whole, including stock trading companies and shadow banks, also played a role in the emergence of the current financial crisis. However, creating money through lending is a typical feature of banks and financial institutions entitled to manage accounts. The main question is whether the financial sector still serves the real economy nowadays.

The answer is: it does not. Banks do not act as money brokers, but create money by lending. For what purpose? The most significant has change has happened in this respect. Today, the main motivator of lending is not the capital requirement of investments anymore, but the opposite is true: financial institutions try to find opportunities for providing loans for any purpose, such as consumption, company acquisition etc. They are not just money brokers and use the deposits, the management of which they are entrusted with, to finance companies (this is more typical of investments banks and other financial institutions), but they also look for lending opportunities and create the money required for lending. For any purpose. If it is needed, they also find central bank money for this purpose from the money "supplies" existing in the economy. (However, to some extent, it is not needed due to clearing.)

Who can benefit from the current loan dumping? Why is it good? The answer is obvious: mostly lenders, as interest is charged on the generated money. (Money creation does not cost anything. Consequently, lending requires a minimal cost of funds, as only clearing balances have to be accounted at the end of the day.) As a result, the bank can make a significant profit by expanding its lending activity.

At the same time, it is observable that the oversupply of credit may have negative aftereffects on the macro-economy. In the period of the expansion of credits and loans, the risk awareness of financial institutions decreases to the minimum. They feel that they can only win, practically without taking any serious risks. On the other hand, the behaviour of lenders changes very quickly if any difficulties arise in loan repayment. Pro-cyclical processes occur. Suddenly, financial resources become scarce, which leads to the early sale of hedge funds, liquidation and considerable material loss on the part of the debtors. Demand falls across the economy. *"When households' loans are underwater, households make inefficient consumption/saving decisions. When banks' bonds are underwater, banks refuse to finance new investments. The two problems can reinforce each other."* (T. Philippon, 2009)

However, it is difficult to warn economic operators against excessive lending, because

consumers, the ones affected in most cases, benefit from early consumption in the short run. Apart from lenders, consumers are also interested in lending. They can take possession of the desired goods earlier, at a time when they could not have paid for them without taking out a loan. Therefore, they are delighted to accept loan offers even if they have to pay a high price: they rarely calculate with the cumulative effect of the *interest* charged on the loan. If they considered it, they would understand that the price they have to pay during the long-term repayment is several times higher than the original price. If the interest compensated for inflation only, there would not be real loss. However, loan interest is real interest, therefore the purchased product costs more regarding the buyer's lifetime income. As lending has become general practice, the slow and systematic financialisation of the society and economy has begun, resulting in the accumulation of liquid assets in the financial sector. The aforementioned phenomenon enabled the infinite renewal of loans, as the financial sector is interested in the allocation of available funds. In view of the above, the lending activity of the banking sector is practically unlimited. Consequently, it continues to enable the redistribution of wealth, financialisation and the exercising of power based on money.

THE STRUCTURE OF BANK ASSETS

In order to assess banking activity, we have to dig deeper in the analysis of the fact that the structure of allocations by banks has changed significantly. *Adair Turner,* the former Chairman of the Financial Services Authority at the Bank of England and the main creator the Basel regulatory framework, demonstrated with ample data in his relatively recent book that the majority of current lending operations by banks do not involve production loans, but rather consumer loans, including mortgage lending (Turner, 2016).

When considering its purpose, housing can be ultimately considered as consumption. However, consumption does not generate fresh income. At the same time, the accumulated interest of the loan may decrease consumption in the future. (Consumers are supposed to obtain funding by taking out new loans... However, it might lead to snowballing indebtedness.) Housing loans belong to consumer loans. They advance long-term housing. Borrowers do not have to spend on housing, instead they have to pay the instalments. (It's true that simultaneously with the loan repayment they accumulate assets. Their currently negative assets (debt) are gradually decreasing. After the repayment of the loan, such assets become positive, the borrowers' real property. Of course, they had to pay a price many times over the original one, but they could save on rental costs during the repayment period. However, it is a risky process, as borrowers may lose their own investments in the case of non-payment...)

When lending to enterprises in the real estate market, the banking sector really lends for a production purpose, as the construction company creates a product for sale. (In this case the ultimate goal of the loan is also consumption, because they intend to sell the real property to someone who wants to live in it. This statement applies to all kinds of production financing. The ultimate goal of a factory's financing is also to get the manufactured products to the consumer...). In this case, the would-be resident usually buys the product with a loan. Housing financing mostly aims to ensure solvent demand on the part of consumers.

At the same time, residential property is a unique product. The owners themselves sell and buy residential properties. In the case of normal consumer goods, reselling is not or just marginally anticipated. However, when it comes to residential property, secondary

trade is very significant. (Especially in America, where the market is vibrant due to the fact that people move frequently). Therefore, real property is a commodity in the market. It is an asset that is placed on the market and whose value largely depends on general prices in the real estate market. If such prices increase for some reason, the value of apartments and houses in private ownership rises, as well. When reselling the apartment, such increase in value can be realised. It is a typical case of earning income that can be considered as a kind of allowance. Selling prices largely depend on the general economic environment created for housing investments, as the demand for homes depends on the possibility of taking out cheap loans. The economic environment, in turn, depends on the economic policy of the state and the cheap money policy of the central bank. Simultaneously with the demand for housing, the market value of existing apartments is also increasing. Interestingly, in the case of own homes, owners can earn allowance-like income by operating their real property as a "piggy bank". If the collateral is higher, a loan with more generous terms and conditions can be taken out, from which the former debt can be repaid. As a result, the difference can be spent in the present... (Of course, the borrower will have to pay back the larger debt. It is an exciting question whether the debtor's future income position will allow the continuous repayment of this debt. If it does not, citizens may, as we mentioned earlier, easily lose their own investments in the case of forced sales.)

CHANGING FINANCIAL DOGMAS

The operation of the free market with the least possible intervention raises a fundamental question: does the *trickle down economy* really work? Is the "trickle-down theory" correct? Because a certain degree of income inequality is only acceptable in this case. The accumulation of profits should not be considered as a problem if it is needed for job-creating investments, as even people with lower income need jobs. As far as theory is concerned, the truthfulness of the statement above is decisive. We can say that trickling down exists, but only at a global level. Due to industrial relocation, productive investments take place in developing countries. However, the concentration of income has no positive effect in the more developed countries. It does not bring about the transfer of the labour force to other areas with higher added value. There is an oversupply of low-skilled employees instead. Wages are stagnating or falling. Globally, there is a shift towards the approximation of income distribution among employees to some extent, but not necessarily based on the concept of Pareto optimality, as for example Chinese wages are rising, while American wages are decreasing in certain cases... The shift in the banks' lending activity towards consumption, along with the stagnation of incomes at 99 percent, means that in developed countries the majority of society is set to fall into a lifetime debt trap.

Following the 2008 economic crisis, certain fundamental axioms of finance, which are currently considered to be carved in stone by academics, should be reconsidered. Nowadays academics do not even allow questions to be raised in connection with such axioms, let alone answer them. In 2003, Nobel laureate *Robert Lucas*, President of the American Economic Association, asserted in the most explicit way that the problem of preventing depressions had been solved. Financial innovations spread the risks sliced and packaged on those who are able to bear them... In 2006, the IMF also thought that financial innovations were *suitable* for rendering the fall of commercial banks unlikely... According to the IMF, "deeper" financial markets have a positive effect anyway. Less than

one year after these statements, tragically, the opposite proved true.

We can state that two fundamental axioms of finance (and economics) have been proved wrong. One of them claimed that human beings were (always) rational, the other one that financial markets were efficient. Today, science still does not know how the human brain works, and ignores the degree of great uncertainty of the future. On the other hand, macroeconomics, as we already mentioned, practically ignores the financial system. It simply does not deal with its operation. (Based on the estimations of *Andrew Haldane*, chief economist of Britain's central bank, for the decade prior to the 2008 crisis, banking issues typically accounted for only around 2 percent of the discussion time in the Bank of England's Monetary Policy Committee, Haldane, 2014). Undoubtedly, they could come up with elegant mathematical models on economic growth, but they had nothing to do with reality. The thinking of central banks has always been based on a conservative approach, such as the Standard Dynamic Stochastic General Equilibrium Models.

In the academics' defend, we should mention that economics has ceased to be a one-dimensional science a long time ago. *Daniel Kahneman's* research in behavioural science already criticised rational decisions earlier (Kahneman, 2011). *Robert Shiller* gave an insight into the real dynamic world of financial markets (Shiller, 2000). *Joseph Stiglitz*, (2012, 2015) and *George Akerlof* (with *Shiller* 2009, 2015) provided ample illustrations of the deficiencies of efficient markets. The issue of the unsustainability of the financial system is also known in Hungarian academic circles. (As a vising professor, *Stefan Brunnhuber* have been giving several lectures on the topic at the University of Szeged and at the Heller Institute of Pázmány Péter Catholic University in Budapest for a decade. In 2003, he presented his views (together with the author of this essay) at an international conference in Debrecen. Recently, his book entitled *Money and Sustainability,* which he wrote with *Bernard Lietaer*, an international expert on local currencies, and two other co-authors was also published in Hungarian. Yes, such views have not become part of the mainstream. The assumption according to which the source of instability is the financial system itself has not become public opinion.

Furthermore, just think about the view that money should be created only by the central bank and the banking system, and not by the government, which has been considered to be carved in stone. *J. F. Kennedy* was assassinated soon after he wanted to take back the power of creating money from the FED.) However, interestingly, in 2003 *Ben Bernanke* did not exclude the possibility of money creation by the government either. It is true, however, that no central bank director has repeated this statement ever since... (Turner, 2016, p. 242) After the 2008 economic crisis, it is apparent that the creation of money supply has taken place in the banking system only formally. There was a government decision behind it. It is a fact that as a result of this decision, the balance sheet total of central banks increased... Ultimately, there was a government decision on money creation, only a bit more expensive one. The central bank received interest for the "solution" in any case.... (the FED is an institution in private ownership).

The pendulum swung too far. While in the middle of the 20th century there was a strong belief in the central governments' planning ability, by the end of the century the opposite conviction became widespread, according to which free markets always produce optimal results. How could we have expected experts to predict the approaching problem? Of course, models cannot predict an imminent crisis if we theoretically exclude this possibility. (It is like repeating the fatal mistakes of believing in the

omnipotence of socialist planning.) Similarly to *Oskar Lange*, who believed in the possibilities of national economic planning based on mathematics, *Robert Lucas* also claimed that *"the mathematics of planning problems turned out to be just the right equipment needed to understand the decentralised interactions of a large number of producers."* (Turner, 2016, p. 249)

By now it has become clear that in practice, both markets and governments can be wrong, however, they can play a positive role, as well. As history has proved, money creation by the government may lead to dangerous hyperinflation. In order to avoid this, society has established absolute restrictions and bestowed independence on the central bank so that it can act as a watchdog. The general financial orthodoxy prior to 2007, however, went to the opposite extreme by claiming the absolute independence of central banks and the fact that they did not finance budget deficits made crises avoidable. Contrary to this, despite the fact that there was no inflation and the central banks were independent, the crisis broke out. The unlimited money creating capacity of the banking system and the shadow banks, in contrast with the limited urban real estate and land market (where the credit demand arose) resulted in inelastic supply along with increasing demand. The process above generated a serious crisis. Macroeconomics completely ignored the role of the financial sector. According to economics, inflation is the increase in the price of consumer goods. (In spite of the fact that asset prices were also affected by inflation.) As it turned out, not only the *fiat money* created by the government, but also an oversupply of privately created money was able to generate a financial crisis. Consequently, absolute beliefs and simple rules cannot render consideration unnecessary. Neither can they prevent the executive power from taking discretionary decisions on occasion if needed.

What could guarantee that one extreme is better than the other? How do we know that private money creation serves the public interest better than money creation by the state? Moreover, credit increase will reach its limits sooner or later, at which point, debt service needs to be restricted in so many ways that consumer demand start falling if the flow of newer and newer loans is interrupted... Incidentally, decision makers everywhere are persons with partial interests. Therefore, *checks and balances* should be established in both cases.

In fact, we can choose only from two imperfect solutions... (Turner, 2016, p. 242) On the one hand, we might think that the government always protects its own interests, wants to be re-elected and looks for material advantages. Consequently, it cannot be expected that the government will not create an oversupply of money, which is a serious threat to society. To this end, we ban the government from creating money. On the other hand, we might believe that the financial sector is only interested in its own short- and medium-term profitability, therefore it tends to indebt the whole society if there are no profitable enterprises it could finance in its area. This process might lead to dangerous bubbles and definitely results in excessive indebtedness, which also prevents the financing of "good investments" in the future. It is harmful in any case. In light of the above, money creation by the state (government) is a better solution.

Of course, the "either...or" solution described above is unlikely. However, money creation by commercial banks has to be restricted, which would require much stricter regulation compared to the current one. In other words, the banking sector should strive to return to its former traditional role as money broker in a sense. There is another extreme idea, similar to *Irving Fisher's* ideas during the Great Depression: the money creation activity of commercial banks should be absolutely restricted. Only the central bank should be entitled to create money. However, this proposal never made it

past being an IMF Working Paper. (Kumhof – Benes, 2012) The actuality of the question is shown by a similar proposal elaborated by Swiss and German economists (*Vollgeld*, i.e.: sovereign money), on which a referendum was held in Switzerland in early June 2018. Eventually, the proposal was refused, though by a lower percentage of voters than at the time of a similar attempt two years earlier. Anyway, the banking system should be developed in a way that, by creating money, it should not have the possibility of providing unlimited loans for real property purchases, company acquisitions and the growth of consumption if no new values are created, but the indebtedness of the economy increases and financialisation is strengthened. In order to achieve this goal, *the introduction of considerably higher capital requirements* seems to be unavoidable. (This is the only relatively effective regulatory tool in creating credit money...) It may sound like a cliché, but we cannot rely on the automatic functioning of free market mechanisms, which solve the problem in a simple macroeconomic regulatory framework. It has proven to be a fatal mistake. If lending becomes a purpose instead of a tool, when banking utterly ignores the interests of the real economy and the public, absolutely prioritising profit generation in the sector, simple market mechanisms will not provide a reassuring, long-lasting solution for the prevention of economic crises.

A BRIEF OUTLOOK

The following question inevitably arises: what is the fundamental reason for the fact that the operation of the financial sector is often struck by a crisis? The answer cannot be found in the narrow field of economics, as apart from the extreme profit motivation of the sector, there is another factor, namely the demographic situation of society. Individuals have to "boost" their consumption, as society is aging in the developed countries. Fewer and fewer children are born. People are desperately trying to save for old age, which will reduce demand sooner or later. Consumption is decreasing, while savings are increasing. Real investment is falling, while unemployment is rising. Consequently, it would be important to increase the consumption of citizens. However, their limited income position can only be expanded by taking out loans. There are ample sources for lending, as a very high income is concentrated in the hands of the top 1 percent of society, who are looking for investment and utilisation opportunities. In view of the above, the proliferation of loans can be explained. But how long can this process continue? It should also be considered why the willingness to have children has dropped to such an extent in developed industrial countries. This question immediately raises psychological, social – and, in some cases, even theological – problems. Without clarifying these problems the solution for the financial crisis cannot be found on economic grounds alone... In could lead to social order based on pure individualism being questioned. Social policy aimed at the prevention of aging would require a complete package of economic policy measures, but first of all sacrifice. The latter, however, can only be expected from the revival of traditional virtues. Justice, wisdom, moderation and strength should be embraced not only by the individual but also in public life. The moral factor cannot be omitted from the analysis of economic processes.

SUMMARY

More and more people demand the reform of the teaching of economics. We can state that economics without values does not exist. The curricula should be more practical. According to

Dani Rodrik, most of the progress in economic theory is horizontal instead of vertical. Instead of having a single model, several economic models overlap each other. We, financial experts, believe that the operation of the system of financial institutions should be included in economics, as without this economic crises cannot be explained.

The rethinking of finance seems to be justified. The portfolio of banks has fundamentally changed recently. Today, bank assets include less real economy investments, as banks tend to finance consumption, which leads to long-lasting indebtedness, as the conditions for repayment are not produced. Along with modern created money, financialisation, the rate of excessive lending and inequality of income distribution are increasing, as well. Furthermore, we can state that the independence of central banks has not been enough to prevent crises so far. Central banks focused only on inflation and not on asset prices. Unfortunately, this policy led to crises, irrespective of whether money was created by the state or by banks: basically we were faced with a choice between two unsatisfactory options. The credit-creating possibilities of banks should be limited by means of supervisory and central bank tools. It is also obvious that we will not be able to solve our economic problems if the avoid answering moral questions. The revival and discussion of traditional moral values in economics seem to be inevitable.

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