UNIVERSITY OF WEST HUNGARY FACULTY OF ECONOMICS

SZÉCHENYI ISTVÁN THEORY AND PRACTICE OF ECONOMIC PROCESSES DOCTORAL SCHOOL

FINANCIAL PROGRAM

INTEGRATION AND FINANCIAL STABILITY

THESES OF THE DISSERTATION

ZITA JUHÁSZ

University of West Hungary Sopron 2008 Doktoral School: Széchenyi István 'Theory and Practice of Economic

Processes'

Doctoral School

Leader: Dr. habil Gidai Erzsébet DSc

Programme: Financial Program

Leader: Dr. habil Báger Gusztáv CSc

Tutor: Dr. habil Báger Gusztáv CSc

1. INTRODUCTION

1.1. Timeliness and importance of the theme

In the economic history of Hungary a new chapter was opened on the 1st of May in 2004 when we joined the European Union. The next leading era-changing step is probably going to be when we can receive the common money of Economic and Monetary Union and we are going to be able to induct the euro. Although this is not the first active monetary union, but the European Financial Union in many ways is without antecedent and incomparable. After all the wrong achievement of the recent past sets back the induct of the euro: going forward in time the chance is decreasing for the Hungarian economy to realize the conceptions of the common currency in the immediate future. So it is important to analyse what has caused this recent, hardly manageable situation, what can we lose and what win in the present position whether by the integration membership. The analysis of different projections of financial stability and the effects of our integration entrance for stability is one of the most relevant – interests both theoretical and technical professionals – issue.

It is required to examine at the time of stability analysis that how far is the entire financial – economic system able to resist the internal and external convulsions and shocks. The shocks of course not in every case lead to crisis, but the unstable financial background prevents the healthy development of economy by itself. There are several views about the causes of financial instability; the relevance of them can be different depending on whether period or which countries do we take into consideration to the subject of analysis. The specialized literature mentions the most frequently the followings: too fast liberalization of the financial sector, unsuitable economic policy, incorrectly chosen rate-mechanism, not efficient resource allocation and some institutional factors like weak supervision of the money-market, unsatisfactory regulation, shortage of market discipline. The already mentioned causes of the financial crises might appear not only jointly but also separately of in

optional combination, so the analysis of financial stability is an extraordinarily complex work.

1.2. Aims of the thesis

The economic literature has been intensively studying the questions of financial stability for a long time. Supposing that in the middle of speeded up events of global economy the theories and statements also quickly go out of date, I attempt to go through on the otherwise rich specialized literature in a permanent respect and to translate into the present economic relations. In the centre of my researches is our country. Primarily I would like to get useful results concerning Hungary. The purpose of my analysis regarding to the European Union is also to promote the relation system's exploration of the Hungarian financial stability and to get to know such factors and relations which are able to decrease the weak points of our financial system.

- 1. I wanted to analyse that how does time factor influence the usability of the already drawn conclusions. It is important to refresh the results continuously because of the quickness of changes; one or two year can mean considerable and significant differences. In the respect of Optimal Currency Area's theory obviously there are already signs of the growth of specialization and the improvement of the mobility of labour and approach to the US (though primarily I wanted to examine the first factor).
- 2. The Stability and Growth Pact gets significant critics, that is why I would like to analyse in a critical respect that what type of influence is there of its existence and mistakes to the financial stability of member states. On the other hand in similar respect I wish to survey the enlarging politics of euro zone. Because of the many critiques what Stability and Growth Pact got I thought change is needed, I wanted to revise this and give critical analysis.

- 3. I set myself an aim to appraise that what size/how large and what kind of sacrifice does the Hungarian economy have to make in the interest of joining euro zone. Is there an order (series) / step of such a great importance which can be comprehensible as a significant sacrifice from the point of view of our financial stability. Such a disadvantage or damage that perhaps questions our joining. It makes the foresight more difficult that Hungary does not have such a strategy that could make a longer period of transition survivable. (In fact, there is not any kind of national strategy).
- 4. Originally my aim was to analyse the expenses and benefits of entering into the euro zone and related on this the suffered damages and won benefits in the respect of financial stability. But this was modifying by the developments of 2006 and the postponement of joining into the distant future. My attention was aimed at the financial institution system and analysis of its economic shocks of the transition time also for that reason because the analysis of the latest years' financial markets, the exploration of different financial mediators' risk today is less worked up area of economic specialized literature.
- 5. One of my main aims was to examine the opportunity of rate regime's change under new circumstances and analyse the effect mechanism of one-sided eurorization and spontaneous processes. I examined if the present currency system provides safety from the point of view of financial stability. I went round the chance of currency board's entry. On the basis of Ize-Parrado study I set myself an aim to appraise of this literature, the usability of the results and transferring across into the euro zone. It is needed to study the longer become temporary period closely (the remaining time until entering euro).
- 6. One of the important examination areas of my dissertation is estimating the benefits and costs, the occurred benefit analysis because of the postponement of joining into the euro zone later. As a result of cost-benefit analysis I would have liked to appraise the several year order of attainable advantages (or the occurred

benefits by now). I wished to devote special attention to seigniorage income will not mean any sort of considerable loss after joining.

1.3. Structure of the dissertation

Chapter 1. In the first part of the dissertation I did the analysis of international and macroeconomic environment of financial institutional system. Primarily I studied the integration and globalisation, those interactions and further more the connecting institutions. (IMF's activity, accomplishment of currency zones).

Chapter 2. Coincidence of different theories, which are related to the financial stability and syntetisation of them. In the first place syntetisation refers to the neo classic and neo Keynes theories in the modern macro economy nowadays. In this part I also mentioned different currency theories considering that later on I am going to study the question of currency selecting, regarding to the transitional period.

Chapter 3. I examined the factors affecting the financial stability in two time distances, in short and long time distance in the part of European Union and euro zone stability. The first chapter of this part is about what kind of advantages and disadvantages are accompanied by giving up the independent currency and in the terms of Hungary I counted out these advantages and benefits (the loss because of the postponement of joining), but the points of view and the way of calculation can be applied to any countries which are already joined and just going to join the Economic and Monetary Union.

Chapter 4. The fourth part is about Hungary's financial stability in three dimensions. In short time the most important question is the budget, in middle time distance the stability of financial sphere and the influence of affecting factors. In this part I examined the question of spontaneous eurorisation in the subject of domestic usability of Latin-American model.

1.4. Methods and used literature, data

The complexity of the subject required using different methods in the analyses. Accordingly to this, the main methods of the research were the followings:

- Independent and critical treatments of foreign and domestic specialized literature.
- Concretisation of theoretical results.
- Selecting the required Hungarian and European macro- and micro data, indexes for the analysis, the cleansing (unification) and working up of them.
- Searching for new relations on the basis of discussions and conversations with theoretical and practical experts.
- Theoretical analysis that aimed at the elaboration of the conclusions and the systematisation of obtained information.
- Syntetisation.
- Analysis of some phenomena and deductible ordinary conclusions from them.
- Statistical analyses, for example progression.
- Giving scientific presentations, which put the preparations and than certain problems through the questions after the presentations in new light and throw light on some, still missing questions.

2. THE MAIN STATEMENTS AND RESULTS OF THE DISSERTATION

2.1. European Union

1. The preservation of monetary independence can have many kinds of reasons, on the other hand if we take the measurable and countable aspects by economic implements into consideration than temporarily the entered countries are the net winners of the joining into euro zone. Of course, after reaching the optimal size, this situation can be changed because according to Pareto-optimum principle – which is one out of the economic theories – it is useful to enlarge the currency zone until this is not accompanied by the decrease of insiders' benefit, so until that level as long as there are not any losers of the admittance of new members.

- 2. On the other hand when the benefits and costs are being estimated we have to be careful because during the cost-benefit computations the well-tried and applied implements can be determined only between a much bigger fault zone on macro level. Some of the experts revealed loss, the others benefit for Hungary. On the basis of my own computations in Hungary the realizable seigniorage income does not decrease in contract with the known study of MNB. During the computations the counted emerging benefit for six years does not cover the one-year deficit of the budget either on net present value. Consequently we have to see that the significance of such calculations like these are ordinarily much more marginal than as it is in the common knowledge, the real benefit is not among the countable benefits, for example growth of stability, security that can be offered by a financial integration for a small country threatened by economic drop behind under the pressure of fortifying competitive environment of globalisation.
- 3. Many currency unions were established in the whole world during our history. But never exactly one like the European Monetary Union. According to its size the United States can be the basis of comparison. However a big uncertainty is being hidden if the European Union relies on this model. Since the establishment of the United States followed a completely different continuity. Perhaps this is the reason why doubt is appearing if the common fiscal policy does not constitute basis for the monetary policy? The answer to this question is that visibly there is claim and tendency to a closer cooperation, agreement and supervision of fiscal policy.

- 4. A strict endeavour for the coordination of fiscal policies is also the Stability and Growth Pact, which tries to provide guarantee of the budgetary discipline's observe. Its purpose in budgetary aspect is to support the monetary policy of ECB (European Central Bank). It would require significant modifications to take its requirements more seriously. It should be more flexible both with considering the features of member states and in the respect of sensitiveness of quick changes by passing of time.
- 5. The analysis of Optimal Currency zone Theory (OCT) is unavoidable in this issue. From this view I verified in agreement with many other previous study that currency zone is not optimal considering the question of mobility of labour, but in the respect of asymmetrical shocks we are in safe; since this is the function of specialization and we got closer to the specialization level of European Union according to the specialization index counted by me where I used the newest data. As the source of the data is the same and the mode of the appropriation has not changed it follows from this, that the index is able to do a demonstrable change in a few years (however only a few percents). Of course during a longer period of time these tendencies can transform. On the other hand the approach is surprising me and it is a definitely bad tendency. According to my supposition in the quite close future an approach has to take place to the OCT features of the USA, which is more specialized and flexible in factor flow.

2.2. Hungary

1. Hungary is threatened from the point of view of financial stability. The reasons are: unsuccessful economic policy in the past and recent past, too fast liberalization of the financial sector and deepening money market competition which proves speedy developing regulation environment, the more or less incorrectly chosen rate mechanism.

- 2. The achievement of Hungarian economy is weak; all of our macro indexes clearly show the recession of the economy. Though I studied the reasons in my dissertation, I only listed them. Partly because I would not have liked politics to take place in my dissertation and since my study was written in the subject of economics it has to focus on the problems related to this subject. The realization of criteria system that is the condition of joining actually has economic stability in view this realization already has happened in the past related to the European Union-, and this is the essential and internal interest of all national economies. In the case of examined endeavours concerning the correction of macro indexes -, the requirements are the same with its own, well-comprehended interest. I also studied that nowadays for what reason and how did the question of budget deficit win priority in contrast with all other macroeconomic indexes (not only in Hungary) and what kind of distort effects of it can appear.
- 3. I intended for a new conclusion the result of an examination that how does the continuous confrontation react: critics for the country's productivity and morality which realizes the brought victims in the interest of joining. On the basis of studied aspects I formulated strong critics in contrast with the euro zone enlarging policy. The EU and EMU's attitude (Economic and Monetary Union) have got significant function in the later joined countries are not or just partly able to do the criterias of the joining into the euro zone, and also the most of these countries are typical of long-lasting and significant macroeconomic off-balance. As Hungary accomplished a strong dependence form foreign investors it is partly due to the European Union. Its unsuccessful achievement is regularly on the agenda and its public and negative judgement does not affect stimulately. The value judgement concerning to our economic achievement increases the possibility of happening financial crisis that threatens Hungary, that is why further prevention steps are needed.
- 4. The judgement of Hungarian financial sector is double. Since the political transformation followed by bank consolidations the institutional factors of market economy has developed in a short period of time through the takeover of

implements, knowledge and practice from western economies. During the political transformation the repayment of credits of Hungarian companies and entrepreneurial sector had difficulties. But the consumers' significant savings financed the deficit of the enterprises and the public sector. However nowadays the consumers are the net borrowers, the measure of their indebtedness is critical. Thirty Forints are debt out of every one hundred Forints spent by consumers on average. If the authority does not want to push our own commercial banks into the background in national competition, it leaves opportunity for them to take higher risks than the average. The question is that what happens if the consumers are going to fool in a large number and how far can gain ground the moral hazard.

- 5. The too fast increasing of currency exposing appears as a problem form the view of credit in both sectors. On the other hand the improvement of penetrating rate is a positive development. I studied Bazel II. to present what kind of refined implements does bank regulation have. Bazel II. is not the equipment to control the opportunities of only one country's banks, but in one hand advanced, on the other hand similarly extended equipments to the competitors.
- 6. The mistaken rate regime can be the cause of instability of financial stability. According to many studies it is not possible and also not suitable to change the elements of currency rate system of economic policy until joining into the euro zone, because during the changeovers the studying time is long and it is accompanied by transitional losses. Although the developments of 2006, the shift of euro zone membership into the distant future proves that we have to think over the correction of the wrongly working systems, because it does not only take further from the expected results, but its negative effects develop gradually and delayed. If we compare the effects of Forint becoming valuable in 2003 and the present condition of the balance of payment as a matter of fact we can recognize the effects of classical J-curve.

- 7. In my opinion we can rule out the fixed currency rate from the currency- and exchange rate systems because the present macroeconomic background does not create the possibilities for its entry and maintenance. I do not claim that the followers are wrong but during this short period of time since their publications won publicity, there were many events, which show the realization of this possibility as an incorrect step.
- 8. In the question of currency system change the main problem is that should we change it or not. The studying time and the disproportion of benefits and costs of adjustment for the short period of time is less and less the reason for changeover than earlier. Because of Hungary's macro indexes and bad position in negotiation with the EU, Hungary's image is so poor in the foreign investors and creditors circles that in present moment we have to abstain from such big changeovers because we cannot risk that perhaps we disturb the market.
- 9. We have to notice that in the view of certain money functions and in the lingering transitional period of time the usage of euro is getting stronger. The question of spontaneous eurorisation is not analysed in wide range in Hungarian specialized literature and neither in the writings of European Union. In my opinion we should review the specialized literature about partial dollar usage because the conclusion of these studies could be useful for us.
- 10. I analysed an IMF study in this topic, which was about Chiles partial dollarisation. The main conclusion of the study is that the government is able to strengthen and weaken the process. Strengthening is not the same than official establishment. With the help of it we can reach the advantages of euro usage already in the transitional time. The financial institutions' (because of the foreign currency expose) and also the corporations' interest would be the symmetry of scales, the approach of currency sort composition of different financial resources and sources. In this respect our financial stability would be definitely corrected.

- 11. Whether happens the mentioned changes above or not, the spontaneous headway of euro is possible. On the basis of Alain Ize and Eric Parrado's study we can create a macro model, which is suitable for analysis and description of the new situation. With its help the benefits and costs of transaction-volatility can be estimated. The optimal monetary policy of the topic of wage indexation can become important in the next few years.
- 12. The order of seigniorage income is an important question. The growth of seigniorage income is possible, but analysts assume this growth in different measures. According to my researches: whether increases or decreases the seigniorage income in Hungary's income, because of the correlation of seigniorage by inflation it is not reasonable leastwise in its entirety to include among the costs of joining. After all independently of joining into the euro zone we aspire after fast disinflation.

3. NEW AND MODERN SUGGESTIONS, RESULTS

- 1. The specialized index calculation which is connected to the Optimal Currency Zone Theory compared to previous calculations shows that the results of the calculations have to be revised continuously, because the changing are relatively quick in this view. The tendency of specialization involves with a consequence that although comparing to the United States the comparison shows significant differences the economic structure and features of euro zone will come closer to the United States'.
- 2. The Stability and Growth Pact requires significant modifications, we should take its requirements more seriously. It should be more flexible partly considering the member states' features, and in the view of sensitiveness of quick changings that happens by passing the time.

- 3. The critique related to the Economic and Monetary Union came to the front after the complete revise of relations. The well recognizable tendencies show a certain self-fulfilment effect. They are able to "move away" the real date of the entry of common currency themselves. It is enough to think that the overturning convergence path can easily defeat the execution of criterias, which are related to the currency rate, inflation and interest rate.
- 4. The execution of the conditions of entrance into the Economic and Monetary Union can be explained by own, well-comprehended national interest. The instable, changing environment does not make the deferring possible. But the claim is arising: the improvement of achievement does not appear as an external compulsion, but it has to be realized as an internal claim. Maybe this could promote the improvement of their efficiency through the acceptance of social programmes. This can be explained as a suggestion formulated by me.
- 5. The want of strategy affects extremely harmfully to the macroeconomic processes also in long time distance. The requirement of entering into the Economic and Monetary Union and also the criteria of sustainable development requires creating an economic strategy. If we stand on the path of sustainable development it also provides the entering into the euro zone; and we have to recognize the expectation of correspondence of macro indexes by the leading powers of European Union, finally their requirements are aimed at this.
- 6. According to several studies it is not possible and expedient to change certain elements of currency rate system or economic policy until joining the euro zone, because during the changings the studying time is long and it is accompanied by transitional losses. The developments of 2006, the moving of euro zone membership into the distant future proves that the correction of wrongly working systems is unavoidable, because it does not only take further from the expected results, but its negative effects develop gradually and they are detained. On the other hand the entry of fixed hard currency rate would not be a logical step. It is an irresponsibility to

give up monetary policy until we cannot enjoy the defence of the common currency. I have not strapped the possibility of other optional currency rate regimes.

- 7. It is worth coming back to the question of currency rate regime if the situation visibly improved and we win confidence noticeably and this will happen relatively quickly. The modification itself is not topical. In the national money markets the judgement of Hungary is not clear because of its macro indexes; that is why it is not worth making such steps, which can make its position uncertain.
- 8. Hungary's euro zone joining has moved away at least four of five years because of its macro data of 2006. During this time such an economy will work which is prepared for using the common currency, the euro. As a result of high level learning and waiting, it is expected that the participants of the economy however not officially will use euro in a spontaneous way. The European Union does not give its blessing for the official takeover but its partial usage is probable. The government is able to create such situation and make such steps that as a result of them we can enjoy the advantages of euro usage without the official takeover.
- 9. Many analyses are made nowadays about the results of developing countries' dollarisation and for the examination of partial currency takeover, where the European specialized literature is little. Many analyses can be translated into the examination of euro takeover of tolerably developed countries. For example the Ize-Parrado study is one of them. It can serve with many lessons concerning to the specific situation of Hungarian economy. By the result of suitable application, the transaction-volatility, the losses caused by internal shocks can be estimated, what we have to suffer until entering euro.
- 10. The study of the effect of transaction-volatility on the basis of Ize-Parrado model can give an interesting result. Moreover the effect of dominant foreign currency can be examined ant its function in financial processes.

11. In the measure of seigniorage income the professional opinions are strongly different. On the basis of my own studies ma opinion is that seigniorage income will rise. Whether we accept this or not, since seigniorage income shows correlation with inflation rate – and we would decrease it in case of keeping the national currency – the most part of its deficiency cannot be counted among the costs of euro entry.

4. REVISION

One of the most actual issues what mainly divides the economists is the question of financial stability. It became important through the frightening crisis occurrences of recent past and nowadays. After we get closer to know the causes of problems and the relations became more recognizable, it is needed to revise these studies, the present events, its tendencies again and again. The phenomena of modern age cause the signs of crisis. In the first part of my dissertation I have analyses the background of this issue, the globalisation, integration tendencies and the relations of these. I analyse the internal relations and trends of instability. In the first place I examined the steps, which were made to prevent the financial and global economic crisis of International Monetary Fund.

I studied the theoretical approaches in a different part where we can see significant differences. Often the approach of macroeconomic and public finance is not consistent. There is not agreement even among macroeconomists; there are different thoughts next to each other. I took care of comparing different authors with different opinions. The discussions related to currency rate claim the short revision of currency theories.

The part about the European Union and euro zone is divided into two main chapters. One of them is the theory of optimal currency zone. The Latin-American study approaches this issue from a different view. The short time distance part starts out from: the estimate of benefits is not only important from the point of view of Hungary, but in connection with other countries which also wish to join and the

countries which already use euro. I highlighted the importance of present value calculation at the time of calculation of costs and benefits. This is very important from our view, because it is not enough that we do not enter so much profit than as if we would join now, but the future money is not worth that much than today's. I also studied the advantages and disadvantages of independence.

I worked up the specialized literature of currency zone – how long is it worth to enlarge it – and I also revised the theory of optimal currency zones when I examined the middle-distance time period. I proved the little chance of happening asymmetrical shocks by a short calculation. The specialized literature is visibly consistent, but raises questions and problems. There is a really significant difference: the independence of fiscal policy in the member states. One of the biggest questions of this single plan (euro zone) is: can a monetary policy exist on such a big area without the integration of fiscal policy?

The most obvious conclusion of the dissertation is that the macroeconomic and financial stability do not demand two different directions in the view of euro zone joining and national economy processes. It should win stressing when orders, decisions happen and how far does it serve the national interests. The changing of the statement of questions is important, because euro zone joining is an element of reaching stability, welfare and national economic goals. All of these are important, because the social accept of decisions are determined from the point of view of success of economic policy. In short time distance the most fundamental is the state of budget because of the established critical situation.

The part before the last one is studying the possibility of changing currency rate regime. It became actual again by the postponement of the date of joining. It is not worth to enter a new currency rate system on a short period of time. But now there is the opportunity to rethink it. The result of my researches, the main conclusion related to this is that it would be irresponsibility to give up monetary policy until we cannot enjoy the defence of common currency. I have compared and knocked

against a lot of theoretical and practical professionals' opinions. In the view of currency rate change my dissertation does not lock out the possibility of floating currency rate system. In the question of currency rate regime today the problem is not that could we possibly choose a better version. The changing itself is not topical.

Because of the postponement of euro entry such problems became medium-distance, which are related to the transitional period. We have to turn our attention that we go through such changings, which are related to the rate also in that case if officially we do not change our rate system. We have been prepared for the entry of a new currency, partly institutionally, partly through the opinion of the people and introducing euro to them. Although the official entry is moving away, this is not appearing for the transitional time. Slowly we realize that euro will not be in use officially nowadays, but the money is still "in our mind". If it is in the people's mind, if there is a claim to use euro in a wide ranged, an official authority cannot stop its expansion. The official takeover of euro is not possible without the ratification of European Central Bank, because we have accepted this in contract. In the specialized literature there were not articles about the dragging on, only the quick takeover has been worked out. The examination of longer transitional period became topical. The countries dependence on the United States have experienced different levels of dollar dominance in their national economies. They can bring in the dollar officially and also partly, so in the view of certain money functions people can replace the national currency on a voluntary basis. A lot of Latin-American studies were created about this, because in this situation the economic policy also has to react to this phenomenon. In the case of those countries, which partly use dollar, there are special steps that can bring them closer to the balance. It seems that Hungary needs to study these questions.

It also comes under the middle-distance processes part, which examines the stability of Hungarian bank system and financial system. This is in a different chapter only because of its length. With Bazel II. I wished to present that the improvement of regulation is happening continuously. We must not distract our attention from the possibility of credit crisis. The indebtedness of inhabitants is getting higher.

According to that fear – which is a delusion – our seigniorage incomes will be lost after joining EU. Since the European Central Bank divides the benefit after creation of euro in the proportion of nominal GDP and population. Of course there can be losers but as the signs show Hungary will be a winner of this. It is also true that seigniorage is in correlation with inflation. If we would not like to join euro zone, we should decrease the inflation rate in our own, well-comprehended interest because of our macroeconomic stability. That is why this part of the deficiency cannot be rightly counted among the costs of euro entry. I ranked this topic among the long time distance because I examined seigniorage incomes from the point of view of how much deficiency and income can we expect of it if we succeeded to take over the common currency.

I devoted quite little attention to the pension system. Because of the complex issue I only highlighted the main factors, I called the attention to those points of view, which exert serious influence on our financial stability.

5. PUBLICATIONS WHILE WORKING ON THE DISSERTATION

Studies published in English in international conference booklets:

- The Change of the Retail Credit in the Future, its Effects on the Propensity to borrow; Micro CAD 2002 International Scientific Conference 7-8 March 2002. Miskolc
- Finance of Regional Development in Hungary Past Experience and Challanges of the Future; Micro CAD 2005. International Scientific Conference 10-11 March 2005. Miskolc
- External equilibrium problems of Hungary reasons and trends; PhD International Scientific Conference Aug. 2007. Miskolc
- Retail Banking Competition as a Dangerous Field; PhD International Scientific Conference Aug. 2007. Miskolc

Studies published in Hungarian conference booklets and newspapers:

- Magyarország pénzügyi stabilitásának változása az EU csatlakozás kapcsán,
 WEU konferencia, Mosonmagyaróvár, 2004. máj. 6.
- Az MNB a KBER-ben és a jegybanki függetlenség megvalósulása; XXVII.
 OTDK, NYME KTK Phd szekció, 2005. Sopron
- A monetáris transzmissziós mechanizmus jellemzői Magyarországon, Gazdaság és Társadalom, 2007.

Presentations (only script):

- A lakossági hitelezés változásai a jövőben, hatásai az eladósodási hajlandóságra, "Kihívások a gazdaságban" konferencia, Miskolc, 2002.március 7 8.
- Pénzügyi ingadozásokra ható tényezők az EU csatlakozás után, Doktorandusz Konferencia, Lillafüred 2003. május
- A régiófinanszírozás tendenciái; projektzáró konferencia, 2005. szeptember,
 Sopron

Lecture notes:

- Makrogazdaságtan II. feladatok 2002. szeptember
- A régiófinanszírozás fő kérdései és irányai Régiófinanszírozás tárgy jegyzet;
 2005. augusztus
- Makroökonómia feladatgyűjtemény, összeállította: Dr Andrássy Adél-Juhász Zita, lektorálta: Dr. Solt Katalin, 2007. június