



Candidates must complete this page and then give this cover and their final version of the extended essay to their supervisor.

Candidate session number			
Candidate name			
School name			
Examination session (May or November)	May	Year	2015

Diploma Programme subject in which this extended essay is registered: Economics

(For an extended essay in the area of languages, state the language and whether it is group 1 or group 2.)

Title of the extended essay: Is there a link between the financial crisis, the real estate market in the US and Klosterneuburg.

### Candidate's declaration

*This declaration must be signed by the candidate; otherwise a mark of zero will be issued.*

The extended essay I am submitting is my own work (apart from guidance allowed by the International Baccalaureate).

I have acknowledged each use of the words, graphics or ideas of another person, whether written, oral or visual.

I am aware that the word limit for all extended essays is 4000 words and that examiners are not required to read beyond this limit.

This is the final version of my extended essay.

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Date: 13.2.15

### Supervisor's report and declaration

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Please comment, as appropriate, on the candidate's performance, the context in which the candidate undertook the research for the extended essay, any difficulties encountered and how these were overcome (see page 13 of the extended essay guide). The concluding interview (viva voce) may provide useful information. These comments can help the examiner award a level for criterion K (holistic judgment). Do not comment on any adverse personal circumstances that may have affected the candidate. If the amount of time spent with the candidate was zero, you must explain this, in particular how it was then possible to authenticate the essay as the candidate's own work. You may attach an additional sheet if there is insufficient space here.

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I have read the final version of the extended essay that will be submitted to the examiner.

To the best of my knowledge, the extended essay is the authentic work of the candidate.

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I spent  hours with the candidate discussing the progress of the extended essay.

Supervisor's signature: \_\_\_\_\_

Date: 13-02-2019

***Research question:***

It was not easy for [redacted] to find the right RQ - but he managed well!

***Approach:***

Very interesting approach; it was difficult to find out about the impacts of the three involved factors;

***Personal engagement:***

Very engaged, showed much interest in the real estate market, very well informed;

***Primary research:***

Good work with the data offered by two real estate offices;

***Conclusions and alternatives:***

[redacted] came to the right conclusions, although perhaps there is a slight lack of alternative viewpoints (would have meant a longer EE)

***Presentation:***

Well presented; some figures could have been better quality;

***Cooperation:***

[redacted] met all the deadlines; very cooperative; completed his EE on time;

**Assessment form (for examiner use only)**

Candidate session number										
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**Achievement level**

Criteria	Examiner 1		Examiner 2		Examiner 3
	maximum		maximum		
A research question	2	<input type="text" value="1"/>	2	<input type="text"/>	<input type="text"/>
B introduction	2	<input type="text" value="1"/>	2	<input type="text"/>	<input type="text"/>
C investigation	4	<input type="text" value="2"/>	4	<input type="text"/>	<input type="text"/>
D knowledge and understanding	4	<input type="text" value="2"/>	4	<input type="text"/>	<input type="text"/>
E reasoned argument	4	<input type="text" value="1"/>	4	<input type="text"/>	<input type="text"/>
F analysis and evaluation	4	<input type="text" value="2"/>	4	<input type="text"/>	<input type="text"/>
G use of subject language	4	<input type="text" value="2"/>	4	<input type="text"/>	<input type="text"/>
H conclusion	2	<input type="text" value="1"/>	2	<input type="text"/>	<input type="text"/>
I formal presentation	4	<input type="text" value="2"/>	4	<input type="text"/>	<input type="text"/>
J abstract	2	<input type="text" value="1"/>	2	<input type="text"/>	<input type="text"/>
K holistic judgment	4	<input type="text" value="2"/>	4	<input type="text"/>	<input type="text"/>
Total out of 36		<input type="text" value="17"/>		<input type="text"/>	<input type="text"/>

Name of examiner 1: \_\_\_\_\_ Examiner number: \_\_\_\_\_  
(CAPITAL letters)

Name of examiner 2: \_\_\_\_\_ Examiner number: \_\_\_\_\_  
(CAPITAL letters)

Name of examiner 3: \_\_\_\_\_ Examiner number: \_\_\_\_\_  
(CAPITAL letters)

IB Assessment Centre use only: B: \_\_\_\_\_

IB Assessment Centre use only: A: \_\_\_\_\_

# Extended Essay in Economics

**Is there a link between the financial crisis, the real estate market in the US and Klosterneuburg?**

**Session:** May 2015

**IB Subject of Essay:** Economics

**Word count:** 3973

# Abstract:

This essay examines the link between the global financial crisis, which started in the year 2007 in the United States of America, the US real estates market and the development of the real estate market in Klosterneuburg, Austria, through the following research question: "Is there a link between the financial crisis, the real estate market in the US and Klosterneuburg?"

In order to answer this question different sources were used. Beside books, Internet links and several articles, local Klosterneuburg real estate agencies were also consulted through interviews. From these sources data was gathered to create graphs and finally answer the research question.

Before discussing the development of the real estate market in Klosterneuburg, this essay gives an insight into the global financial crisis, how it evolved and how it affected Europe and its citizens. Moreover, this work also gives an overview of the situation of the real estate market in the US. Additionally, it provides reasons why people were investing in real estates as a consequence of the crisis.

Based on the evaluation of the collected data, it can be claimed that there had been a run on real estate in Klosterneuburg following the crisis. This is due to the fact that mainly own capital was used to buy real estates and not credits as before. Additionally, people were looking for a safe haven to invest in. Other assets than real estates were however not really regarded as safe and profitable after the crisis anymore. So real estates in Klosterneuburg, which were back then not only considered as safe but also as relatively cheap, were the best asset to invest in.

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# 1 Introduction

“The financial market crisis that erupted in August 2007 has developed into the largest financial shock since the Great Depression, inflicting heavy damage on markets and institutions at the core of the financial system”<sup>1</sup>. This quote is just one of thousands describing how catastrophic this financial crisis was and that there were many effects on several sectors in the financial system. One of these sectors is the real estate market, which was badly affected by this crisis. “Austria’s housing bubble is a part of the overall Post-2009 Northern & Western European Housing Bubble that has inflated because of the strong investment inflows that these countries have attracted since the Global Financial Crisis”<sup>2</sup>.

## 1.1 Goal

Of “course we know that there have been crises before and there will be again”.<sup>3</sup>

Although society has encountered many financial crises during the last couple of decades it was still unable to prevent this one and its impact. The following research question has been chosen: “Is there a link between the financial crisis, the real estate market in the US and Klosterneuburg?”

The goal of this extended essay is to answer this research question and support the answers by collected data, graphs and figures.

## 1.2 Method

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<sup>1</sup> International Monetary Fund 9th April 2008; “World economic Outlook; Houses and the business cycle” Internet:

<http://www.imf.org/external/pubs/ft/weo/2008/01/pdf/text.pdf> Accessed on 12 October 2014.

<sup>2</sup> Colombo, Jesse; “Austria’s Housing Bubble”. Internet:  
<http://www.thebubblebubble.com/austria-housing-bubble/> Accessed on 12 October 2014.

<sup>3</sup> The Sanford C. Bernstein & Co. Center for Leadership and Ethics; “Preventing the Next Financial Crisis”. Internet:  
[http://www8.gsb.columbia.edu/leadership/sites/leadership/files/bernstein\\_financial\\_crisis\\_report.pdf](http://www8.gsb.columbia.edu/leadership/sites/leadership/files/bernstein_financial_crisis_report.pdf) Accessed on 12 October 2014.



In order to answer the research question, data from two different real estate offices, both operating in Klosterneuburg, have been collected and will be used to show the impact on the real estate market, if there has been one. Moreover interviews were done with them. Finally different web pages have been consulted to answer the question if the change in the real estate market has been caused by the financial crisis.

### 1.3 Delimitation

The research question has been limited both geographically and temporally.

The chosen geographical area for this essay is the municipality of Klosterneuburg, as a broad set of data is available for this city. Additionally, the area around Vienna seems perfect for answering the research question as many people invested in this area.

The focus of this essay is set on the time interval since the start of the “worst crisis since '30s”<sup>4</sup> until the first quarter of 2014 as “Austria’s housing prices are up a stout 60% since 2005, a rise completely unabated by the global financial crisis”<sup>5</sup>.

### 1.4 Result

There had indeed been a big impact by the financial crisis on the real estate market in Austria and in Klosterneuburg, as the crisis clearly created a run on real estates.

### 1.5 Outline

Part one has given an overview and shown the goals and limits. Part two will describe the start of the financial crisis, offer reasons for it and provide additional background information. Additionally it will establish the link between the crisis and the run on the real estates in Austria. Part three will provide an answer to the research question through collected data and also show the development of the real estate market in Klosterneuburg following the crisis. Sources as well as raw data are found in the appendix at the end.

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<sup>4</sup> Hilsenrath, Jon; NG Serena; Paletta Damian; “Worst Crisis Since '30s, With no End Yet in Sight”. Internet: <http://online.wsj.com/news/articles/SB122169431617549947> Accessed on 12 October 2014.

<sup>5</sup> Colombo, Jesse; “Austria’s Housing Bubble”. Internet: <http://www.thebubblebubble.com/austria-housing-bubble/> Accessed on 12 October 2014.

## Part 2:

# The beginning of the financial crisis

## 2.1 Overview of the crisis and the interest rates in the US

"The financial crisis of 2007–2008, also known as the Global Financial Crisis and 2008 financial crisis, is considered by many economists to have been the worst financial crisis since the Great Depression of the 1930s."<sup>6</sup> There are many different reasons as to why the crisis developed the way it did. The crisis later then led to the global recession from 2008 – 2012. In many areas it was the housing market that suffered particularly.<sup>7</sup> Most economic scientists agree that the main trigger was the burst of the housing bubble in America. The housing bubble in American first appeared on the scene in the year 1998 and peaked in the year 2006. During this time period the price of the typical American house increased by 124%.<sup>8</sup> Additionally, the number of people who owned a house rose by 3.2%. How and why did this happen? The crisis has its origin at the beginning of this millennium. Since 2001 and specifically since 11<sup>th</sup> September 2001 the US central bank has followed a policy of low interest rates to prevent a panic following the terror attacks. Yet also after years, when the American economy was already doing much better, the FED still kept sticking to this policy. So the interest rates had fallen from slightly more than 6.5 % at the beginning of the year 2001 to approximately 2% at the end of the year 2001. Later on, the rates still kept falling and so at the beginning of 2003 the rates were

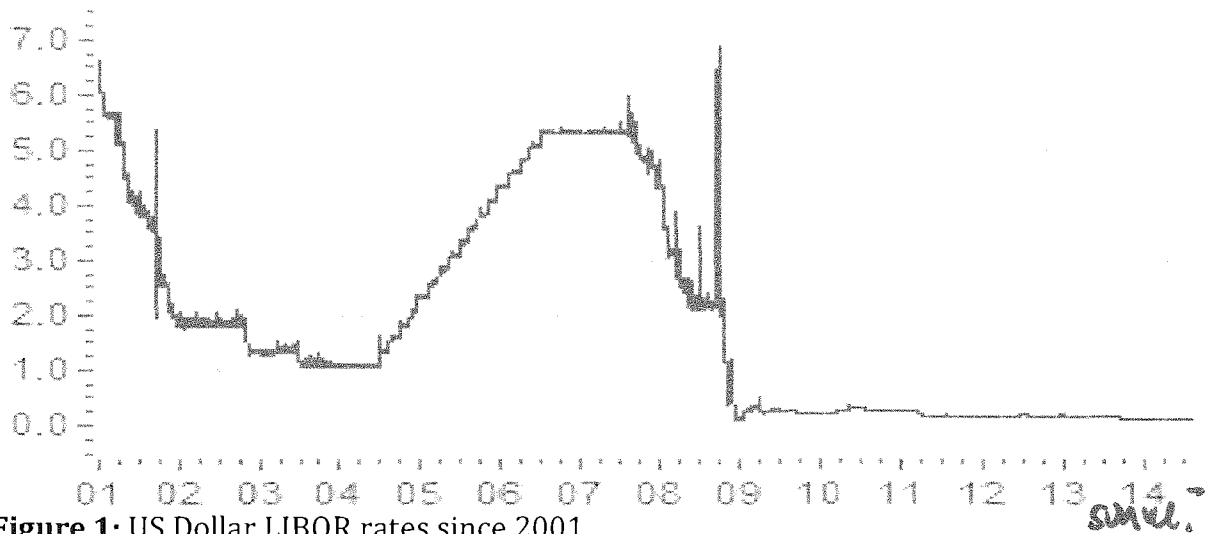
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<sup>6</sup> Wikipedia; "Financial crisis of 2007-08". Internet:  
[http://en.wikipedia.org/wiki/Financial\\_crisis\\_of\\_2007-08](http://en.wikipedia.org/wiki/Financial_crisis_of_2007-08) Accessed on 12 October 2014.

<sup>7</sup> Wikipedia; "Financial crisis of 2007-08". Internet:  
[http://en.wikipedia.org/wiki/Financial\\_crisis\\_of\\_2007-08](http://en.wikipedia.org/wiki/Financial_crisis_of_2007-08) Accessed on 12 October 2014.

<sup>8</sup> The Economist; "CSI: credit crunch" Internet:  
<http://www.economist.com/node/9972489> Accessed on 12 October 2014.

at about 1%. This situation remains stable until the year 2004 when the rates slowly started to increase again<sup>9</sup>.



**Figure 1:** US Dollar LIBOR rates since 2001

This was a problem because many people had credits with flexible interest rates and low starting interest rates, which were also called “shell credits”. These credits had interest rates fixed to the LIBOR. This meant that when the LIBOR increased, their interest rates on their credit increased, too<sup>10</sup>. The development of the US Dollar Libor rates since 2001 can be seen in figure 1<sup>11</sup>. The US Dollar “LIBOR or ICE LIBOR (previously BBA LIBOR) is a benchmark rate that some of the world’s leading banks charge each other for short-term loans. It stands for Intercontinental Exchange London Interbank Offered Rate and serves as the first step to calculate interest rates on various loans throughout the world.”<sup>12</sup>

*general!*

<sup>9</sup>Mildner, Stormy-Annka; “Ursachen der Finanzkrise: Ein Blick in die USA”. Internet: <http://www.bpb.de/politik/wirtschaft/finanzmaerkte/135463/ursachen-der-finanzkrise?p=all> Accessed on 12 October 2014.

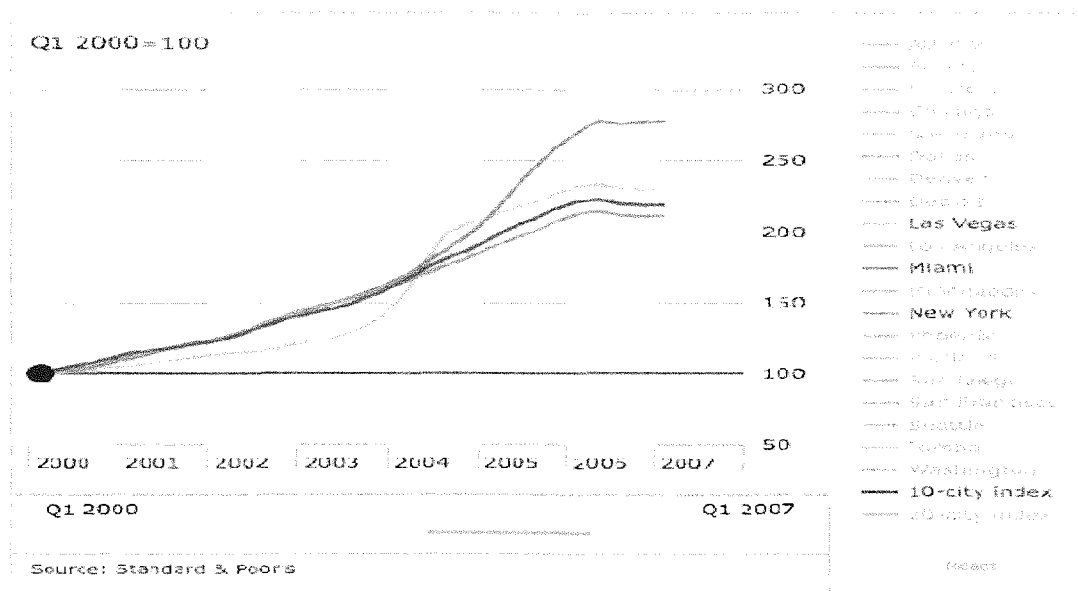
<sup>10</sup>Buch

<sup>11</sup>Global rates; “US Dollar LIBOR rates 2000”. Internet: <http://www.global-rates.com/interest-rates/libor/american-dollar/2000.aspx> Accessed on 12 October 2014.

<sup>12</sup>Investopedia; “Definition of ‘LIBOR’”. Internet: <http://www.investopedia.com/terms/l/libor.asp> Accessed on 12 October 2014.

## 2.2 Housing market in the US

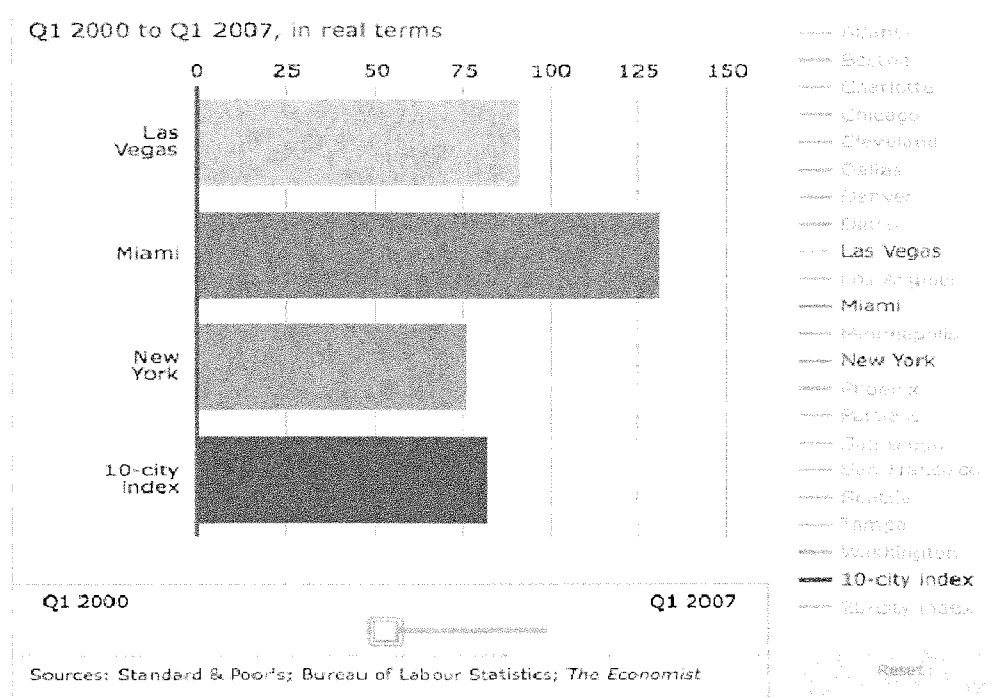
As is clear from above, money had been very cheap over a couple of years and many American citizens used this chance and borrowed money during this time period. Most of these people used the money to buy/build their own house, which they could not afford in another way. As a result the demand for houses increased faster than the supply, which resulted in an explosion of the real estate prices in the USA.



**Figure 2:** House price increase in America

Figure 2 represents the house price increase with the year 2000 being the base year represented by the red line. One can clearly see that the price increased rapidly from 2000 onwards. If you have a look at Las Vegas, which is shown by the turquoise line, you can clearly figure out that in the third quarter of 2003 to the third quarter of 2004 the prices went from about 130 to 200. If you look for example at Miami, which is represented by the green line, the house prices nearly tripled during 6 years, which means an average increase of about 30%. The dark blue line represents the “10-City Index”, which also more than doubled just as New York did.<sup>13</sup>

<sup>13</sup> The Economist; “Reality Check” Internet:  
<http://www.economist.com/blogs/graphicdetail/2014/02/us-house-prices>  
 Accessed on 12 October 2014.



**Figure 3:** Percentage change

But what does this mean for the real estate market in real terms? As figure 3 shows, the house prices increased in Miami by about 125 % and the 10 - city index by about 75 %. This enormous increase is to a huge part caused by the increased demand.<sup>14</sup>

Additionally in the time from 1996 to 2006 the average real estate price increase had been about 97 %. This is more than three times as much as in the 16 years before, which had been 27 %. Another indication for people buying houses and running into more and more debts is that since 1993 the ratio between the GDP and the indebtedness of households has been at a steady rate of 80 %. But in the year 2003 the ratio increased to 120 % and in 2006 even to 130 % <sup>15</sup>. The question that needs to be asked at that point is the following: how were so many people able to borrow so much money?

## 2.3 Subprime crisis

As many people wanted to buy a home with the prices rapidly increasing, banks started to lend money to people also with a low degree of creditworthiness. These credits have

<sup>14</sup> The Economist; "Reality Check" Internet: <http://www.economist.com/blogs/graphicdetail/2014/02/us-house-prices> Accessed on 12 October 2014.

<sup>15</sup> Reinhart, Carmen; Rogoff, Kenneth; (2013) "Dieses Mal ist alles anders: Acht Jahrhunderte Finanzkrisen"; München: FinanzBuch Verlag;

been given by local banks or by real estate financiers. Sometimes these credits were given to people who did not even have any bank securities. These second-class credits were called subprime loans. Generally speaking they were a bit more expensive than normal ones, but people were lucky that they got a credit at all.<sup>16</sup> Banks offered these credits because even if there had been a bad investment, there would eventually not be a big loss thanks to the increase in the house prices. As a result the banks became more and more willing to allow riskier credits.<sup>17</sup> This credit risk, which the banks had with the subprime loans, was passed on to other banks, including banks in foreign countries. With these subprime loans banks tried to keep their own risk as low as possible. As a result they just sold them to other bigger banks. These banks bunched the subprime loans with normal ones and again sold them. Many banks, which then bought these packages, did most of the time not even know what they really had bought.

## 2.4 Mortgage-Backed Securities (MBS)

As mentioned above many people saw the dream of their own home come true thanks to the money they borrowed. Yet as they neither owned money nor property they could use as security for the bank in case that the mortgages cannot be paid back, the people used the houses they had bought with the borrowed money as a back-up security.<sup>18</sup> This way of financing is called "mortgage-backed securities".

## 2.5 The interest rates start to rise

As you can see in figure 1, interest rates slowly started to increase from the middle of 2004 onwards. At a certain point many people were not able to pay their credits back. Additionally the demand slowly decreased, and the boom came to a halt. As a result the

<sup>16</sup> Krüger, Andrea; "Fragen und Antworten zur Immobilienkrise". Internet: <http://www.tagesschau.de/wirtschaft/immobilienkrise16.html> Accessed on 12 October 2014

<sup>17</sup> Wikipedia; "Financial crisis of 2007-08". Internet: [http://en.wikipedia.org/wiki/Financial\\_crisis\\_of\\_2007-08](http://en.wikipedia.org/wiki/Financial_crisis_of_2007-08) Accessed on 12 October 2014.

<sup>18</sup> <sup>18</sup>Mildner, Stormy-Annka; "Ursachen der Finanzkrise: Ein Blick in die USA". Internet: <http://www.bpb.de/politik/wirtschaft/finanzmaerkte/135463/ursachen-der-finanzkrise?p=all> Accessed on 12 October 2014.

house prices also started to decrease. These two factors were becoming worse and worse until the bubble burst in the year 2006.<sup>19</sup> Due to MBS and CMOs not only people but also banks started to struggle and got into problems. At the end of the year 2006 the number of foreclosure of mortgaged credits had been at a 40-year high. As a result many banks started to struggle because they did not get back the money which they previously had carelessly given out. Additionally the MBS, which were securities for these credits, were the houses that had been built through the borrowed money. Yet as the bubble started to burst the house prices started to decrease and the banks did not get the money back. As these credits had been sold all over the world, everybody who had previously bought these tranches, was affected.

## 2.6 Collateralized debt obligations:

Due to CDOs or collateralized debt obligations the crisis spread over the whole world within days and nearly everybody was affected by the crisis. But what are CDOs?

Banks created many subprime loans, yet as they did not want to be responsible for the risk should people not be able to pay back their loans, they structured these subprime loans into tranches. This means that many subprime loans were put together and sold as one product "so it is a structured financial product that pools together cash flow-generating assets and repackages this asset pool into discrete tranches that can be sold to investors".<sup>20</sup> Additionally banks sold these CDOs because they had a maximum limit of credits they are allowed to have.

In a next step rating agencies had to rate these tranches. As they thought it quite unlikely that for example from the 100 subprime loans, which made up a tranche, more than 5 % will fail to pay their mortgages back, they rated most of these tranches with the best possible rating, i.e. a triple A. As a result many banks across the whole world trusted these ratings and bought these tranches. Something else that convinced many investors to buy these CDOs was that it was possible to insure these tranches, which meant that if

<sup>19</sup>Krüger, Andrea; "Fragen und Antworten zur Immobilienkrise". Internet: <http://www.tagesschau.de/wirtschaft/immobilienkrise16.html> Accessed on 12 October 2014

<sup>20</sup>Investopedia; "Definition of 'Collateral Debt Obligation- CDO'". Internet: <http://www.investopedia.com/terms/c/cdo.asp> Accessed on 12 October 2014.

people were not able to pay their loans back, the insurance company would jump in. Investors had to pay a certain amount to these insurance companies once a year and as a result they would be on the safe side, at least they thought so.

Moreover you were also able to insure CDOs you did not possess. So you had to pay the amount once a year and if these CDOs failed, you would also be covered and not run into any problems.

## 2.7 Grexit

The term "Grexit" was introduced during the year 2012 when the whole world was looking at Greece and Europe and everybody was afraid of the answer to the following question: Will Greece have to exit the Eurozone?<sup>21</sup> Many people were afraid of Greece leaving the Eurozone, i.e a "Grexit". This would have meant that the Greek economy would get isolated from the EU economy, which would have required that Greek banks would have had to leave the Eurozone, that they would get a new currency and that ? ATMs and banks would have been closed over a longer time period. These would have been only some of the consequences. Due to the looming danger, many people already started to transfer their money from Greek banks to other banks in Europe. As a result "Greek bank deposits dropped about 23 billion euros [...] or about 13%, to about 160 billion euros".<sup>22</sup> Yet not only people in Greece were afraid of this scenario. Many people who possessed Euros were looking for ways to invest their money into assets which were regarded as safe because they were also afraid that the Euro would suffer under the Grexit. As the financial crisis and the stock crash were still present there were no alternatives than to look for real estates. This was especially true for Austrians.

why?

ER?

<sup>21</sup> Regula, Traci; "Grexit". Internet: <http://gogreece.about.com/od/Glossary-of-Greek-Terms/g/Grexit-What-does-Grexit-Mean.htm> Accessed on 12 October 2014.

<sup>22</sup> Randow, Jana; Thesing, Gabi (23 May 2012). "War-Gaming Greek Euro Exit Shows Hazards in 46-Hour Weekend". Internet: <http://www.bloomberg.com/news/2012-05-22/war-gaming-greek-euro-exit-highlights-hazards-in-46-hour-weekend.html> Accessed on 12 October 2014.

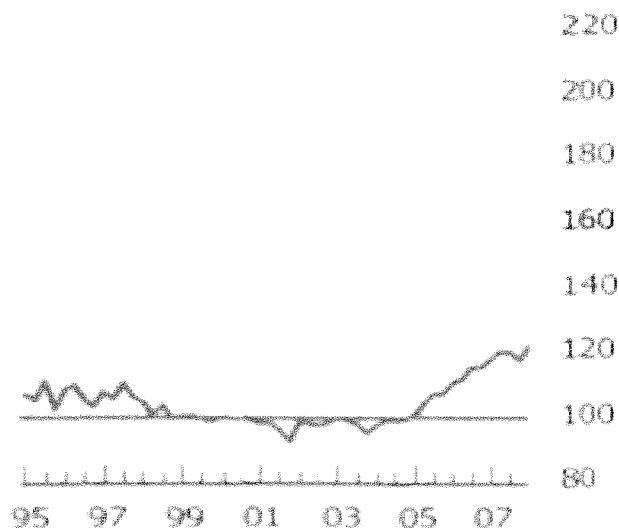


## Part 3:

# The Austrian real estate market

## 3.1 The Austrian and Klosterneuburg real estate markets

Why were people and investors investing in Austrian and specifically in Klosterneuburg? To answer this question we have to look at the past. Whereas house prices were increasing sharply in the US and nearly tripled due to the low interest rates between the years 2001 and 2006, the real estate market in Klosterneuburg stagnated.

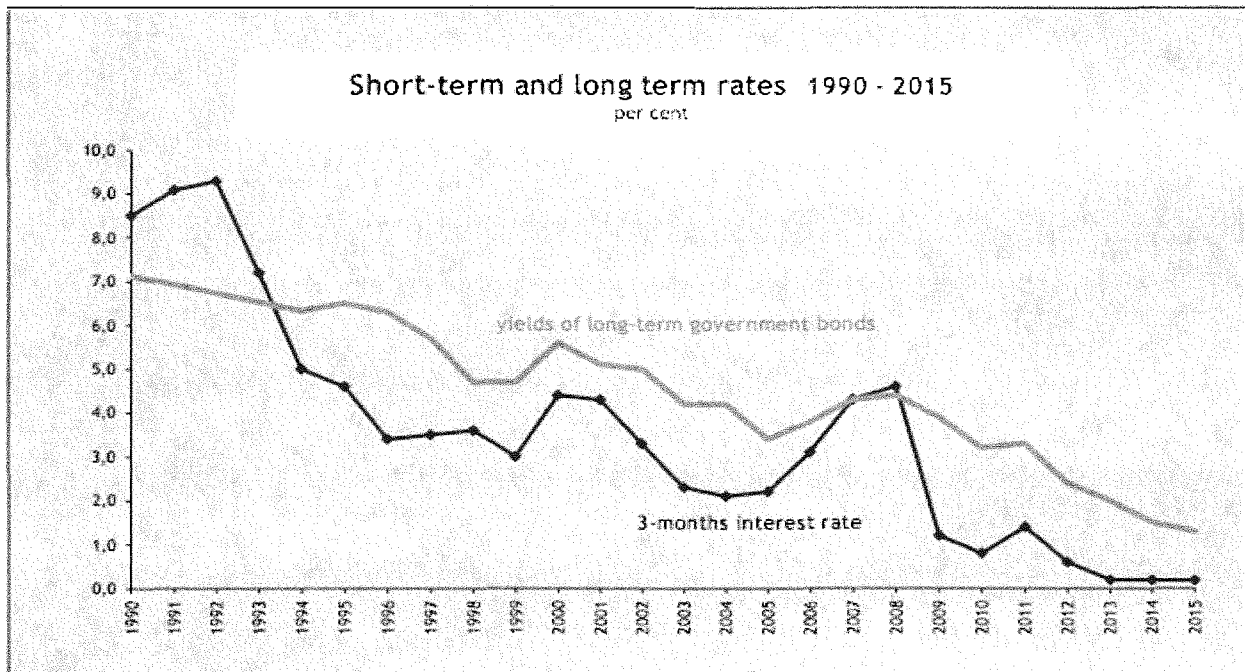


**Figure 4:** Austrian real estate prices

From 1999 to 2005 the real estate price increase in Austria was only about 2%, adjusted to inflation, which can be seen in figure 4,<sup>23</sup> which was a very atypical trend as the real estate prices in the whole world were exploding. This had two main reasons: First, the run on real estates in 1995 when prices in Klosterneuburg and Austria had increased sharply<sup>24</sup>.

<sup>23</sup> Global Property Guide; "House prices worldwide Austria" Internet: <http://www.globalpropertyguide.com/real-estate-house-prices/A#austria> Accessed on 12 October 2014.

<sup>24</sup> S. Lee, Gabriel; Schmidt-Dengler, Philipp; Felderer, Bernhard; Helmenstein, Christian; "Austrian Demography and Housing Demand: Is There a Connection". Internet: <http://elaine.ihs.ac.at/~lee/gabe empirica2001.pdf> Accessed on 12 October 2014.



**Figure 5:** Interest rates in Austria

Next, people were investing in America as prices were increasing there and people tried to make profits. So only a few were really interested in the Klosterneuburg and Austrian real estate markets.

Another aspect worth mentioning are the interest rates. As shown in 2.2, interest rates in America were quite low whereas interest rates in Austria were rather high and as a result there was no real change in the real estate market in Austria. As you can see in figure 5 the interest rates had never been below 3% until 2012 when the crisis was nearly over<sup>25</sup>.

So the situation was the complete opposite of the one in America. As prices started to stop increasing in America during the year 2006, as said at the beginning and shown in figure 3, slow movement could be observed in the real estate market in Austria.

<sup>25</sup> Wirtschaftskammer Österreich; "Economic Situation and Outlook". Internet: <http://www.wko.at/statistik/prognose/outlook.pdf> Accessed on 12 October 2014.

## Immobilienpreise im internationalen Vergleich

## Wohnimmobilienpreise der Euroraumländer (Q2 13)

Index (2007Q1 = 100)

150

140

130

120

110

100

90

80

70

60

50

IE ES EE GR NL SI MT 16 IT CY PT FR DE SK FI LU BE AT

Quelle: EZB.

**Figure 6:** Real estate price increase since 2007 in EU comparison

Regardless of the data source and segmentation criteria, international surveys show that housing in Austria is relatively cheap.”<sup>26</sup> From 2007 until the middle of 2013 prices increased by about 40%. This was the highest increase in the Eurozone, as figure 6 shows.<sup>27</sup> Real estate prices in Austria increased by 14% more than in Luxemburg, where the second biggest increase was observable.

As prices started to increase it became clear that the real estate market split up into two parts: first, Vienna and the area around it, which is called “Speckgürtel”<sup>28</sup>, which also includes Klosterneuburg and second, the rest of Austria. This is shown in figure 7<sup>29</sup>.

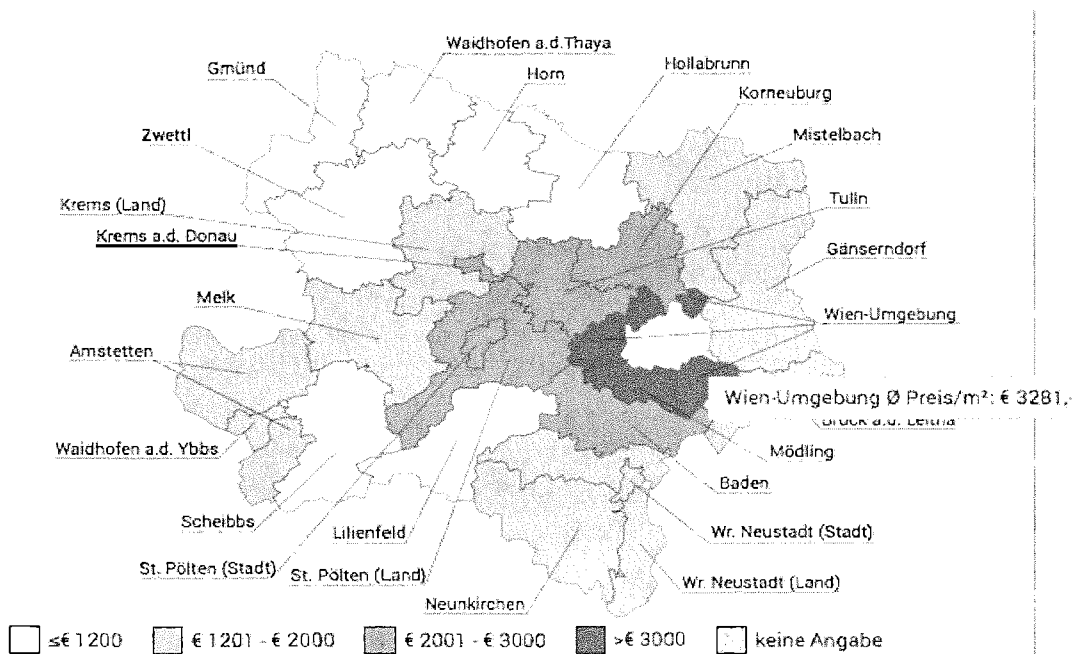
<sup>26</sup> Schestauber, Karla; Pudschedl, Walter; Wolf, Günter; Tomschizek, Doris; Stögbauer, Alexander; Schneider, Helmut; “The Austrian real estate market – icing on the cake” Internet: [http://www.bankaustria.at/files/RealEstate\\_Oesterreich\\_09-13\\_e.pdf](http://www.bankaustria.at/files/RealEstate_Oesterreich_09-13_e.pdf) Accessed on 12 October 2014.

<sup>27</sup> Ruff, Claudia; “Notenbank halt Wiener Immobilien für überbewertet” <http://derstandard.at/1389857604782/Wiener-Wohnimmobilien-zunehmend-ueberbewertet> Accessed on 12 October 2014

<sup>28</sup> German term for affluent suburbs

<sup>29</sup> Immobilienpreise; Internet:

<http://www.immopreise.at/Niederoesterreich/Haus/Eigentum> Accessed on 12 October 2014.



**Figure 7:** Real estate prices in Lower Austria

The dark blue area surrounded by the purple colour, next to the white spot (which is Vienna), is the district of “Wien – Umgebung” to which Klosterneuburg belongs. As can be seen, prices are the highest there, with an average price of 3281€ per square meter and are above the Austrians average, which is 2223,23€. The price increases in Vienna and Klosterneuburg were much higher than in the rest of Austria. Over a couple of years Klosterneuburg has been the most expensive city in lower Austria.<sup>30</sup> One reason for this was that “for four consecutive years (2009–2012), the human-resource-consulting firm Mercer ranked Vienna first in its annual ‘Quality of Living’ survey of hundreds of cities around the world.”<sup>31</sup> As the supply for houses is quite limited in Vienna, the prices for real estates also increased in the area around it, including Klosterneuburg.

<sup>30</sup> Raiffeisen Immobilien Vermittlung; “Immobilienmarkt Österreich: Die Stunde der Verkäufer”.

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<sup>31</sup>Wikipedia; “Vienna”. Internet: <http://en.wikipedia.org/wiki/Vienna> Accessed on 12 October 2014.

## 3.2 The real estate market in Klosterneuburg since 2007

Real estate prices in Klosterneuburg have consistently been rising over the last years. Since the year 2007 there has been a steady price increase in Klosterneuburg of at least 5%. Prices in top areas were increasing much faster and higher. Most of the real estates, which were bought in Vienna and Klosterneuburg, were not financed through credits but through own capital<sup>32</sup>. Since prices were increasing so rapidly in Vienna, a new run came up towards areas a bit further away from Vienna as many people could simply not afford these prices. This can also be seen in figure 7, which shows that prices are the highest in the "Speckgürtel."

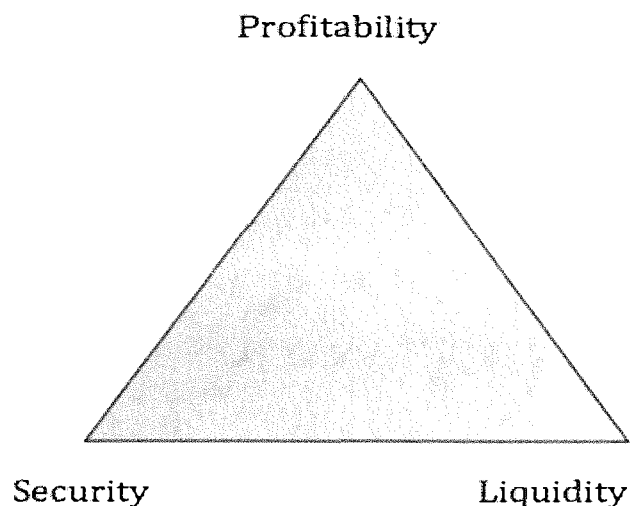
## 3.3 Real estates in Klosterneuburg are a safe haven

In the year 2008 the square meter price in Klosterneuburg was about 2400€ on average. While prices were in free fall in America, prices in Austria were increasing. Also during the third and fourth quarter of the year 2008, a price increase was observable in Klosterneuburg of 6% in Q3 and 9% in Q4, as interviews that were carried out to gather local data with real estate agencies have shown.<sup>33</sup> This increase in value has one main reason: Real estates in Austria have always been regarded as a safe haven and therefore a perfect form of investment during the crisis. What investors in times of economic crises are particularly after can be shown through the "magic triangle for investors"<sup>34</sup>, which is shown in figure 8.

<sup>32</sup> Ruff, Claudia; "Notenbank halt Wiener Immobilien für überbewertet" <http://derstandard.at/1389857604782/Wiener-Wohnimmobilien-zunehmend-ueberbewertet> Accessed on 12 October 2014

<sup>33</sup> Two interviews with local real estate agents were conducted in the course of the research process. For specific data see Appendix.

<sup>34</sup> Own translation for German term: "Magisches Dreieck für Investoren"



**Figure 8:** Magic triangle for investors

This triangle shows the three most important things investors should consider when looking for an investment: profitability, security and liquidity. The more stock prices decreased, the less secure and profitable they became. Investors then realized that real estates in Austria were perfect as they were very secure and as prices were increasing rapidly. Liquidity was not important to investors at that time. Hence especially during the crisis real estates in Austria were the perfect asset to invest in with own capital and with the lowest possible risk of a decrease in value.<sup>35</sup>

### 3.4 Real estates in Klosterneuburg during the crisis

The USA announced that "[t]he December sales pace was 44.8% below the same month a year ago, when the annual rate of new home sales was 600,000." This was announced at the beginning of the year 2009, creating panic and making many people sceptic about the current financial situation.<sup>36</sup> Something else that the USA announced and that shocked the whole financial sector was that their budget deficit would reach 1.8 trillion

<sup>35</sup> Baldia, Patrick; "Österreich: Sicherer Hafen für internationale Anleger." Internet: [http://immobilien.diepresse.com/home/oesterreich/1318301/Oesterreich\\_Sicherer-Hafen-fur-internationale-Anleger](http://immobilien.diepresse.com/home/oesterreich/1318301/Oesterreich_Sicherer-Hafen-fur-internationale-Anleger) Accessed on 12 October 2014

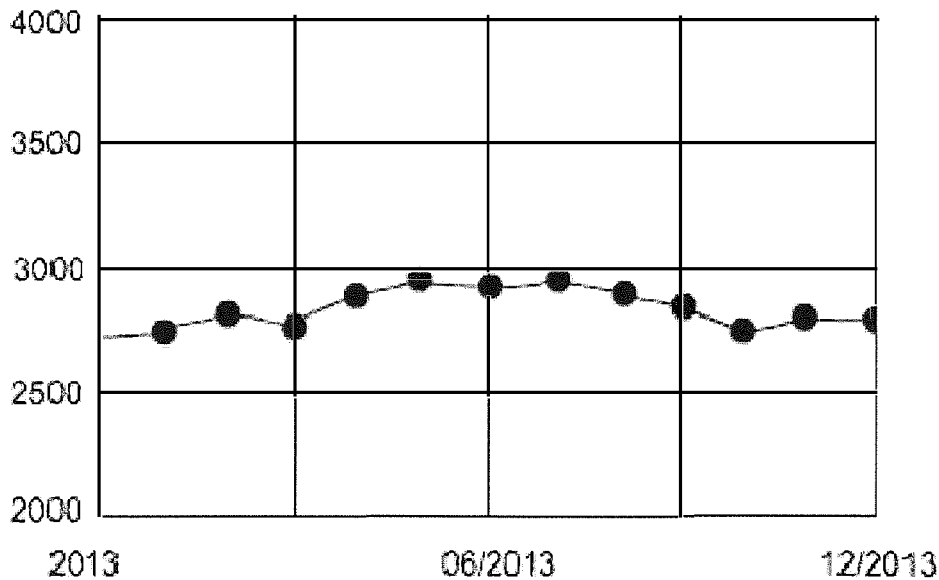
<sup>36</sup> Clifford, Catherine; "New home sales plunge to lowest on record". Internet: [http://money.cnn.com/2009/01/29/real\\_estate/new\\_homes/index.htm?postversion=2009012911](http://money.cnn.com/2009/01/29/real_estate/new_homes/index.htm?postversion=2009012911) Accessed on 12 October 2014

dollar<sup>37</sup>, and “[l]eading US indexes saw their biggest one-day fall in nearly two months, with banking shares falling sharply amid concerns over the sector's outlook.”<sup>38</sup> “We thought 2008 was bad. I think 2009 is going to be a continuation of that whole song,”<sup>39</sup> As one can tell, the economic outlook was quite negative but the real estate prices in Austria and Klosterneuburg were still increasing as this was a place where people put their money as they regarded it as a safe haven.

### 3.5 The highest price increase in Klosterneuburg

The strongest increase in real estate prices was observable in the year 2012 where prices increased by nearly 25 %. During the year 2013 prices were not increasing so steeply, yet there still was an increase of about 5%, as figure 9 shows. This is to a certain extent caused by the low interest rates, which were a result of the financial crisis.

Despite this fact the number of real estates that were sold decreased by about 15-18 % in the year 2013.<sup>40</sup>



**Figure 9:** Real estates in the year 2013

<sup>37</sup> BBC News; “US deficit ‘to fit 1.8 trillion dollar’”. Internet:

<http://news.bbc.co.uk/2/hi/business/7955340.stm> Accessed on 12 October 2014

<sup>38</sup> BBC News; “Us finance stocks decline sharply”. Internet:

<http://news.bbc.co.uk/2/hi/business/7841404.stm> Accessed on 12 October 2014

<sup>39</sup> Keith Wirtz, chief investment officer of Fifth Third Asset

Management. <http://news.bbc.co.uk/2/hi/business/7841404.stm>

<sup>40</sup> Wohnnet; “Markettrends Immobilien”;

Internet: <http://www.wohnet.at/immobilienpreise.htm> Accessed on 12 October 2014

The red line represents the real estate market in Klosterneuburg and shows an overall increase. The black line represents the first district in Vienna where the prices were not increasing so massively and steadily as in Klosterneuburg. Also, in Vienna there was even a decrease during March 2014.

All real estate?



## Part 4:

# Conclusion

## 4.1 Summary

The essay clearly shows that the real estate market in the US, having caused the financial crisis, indeed created a run on real estates in Austria and Klosterneuburg.

The financial crisis was a result of the collapse of the real estate market in the US because many subprime loans had been granted during the real estate boom in the US. Later, when the value of US houses started to decrease, many people were not able to pay the credits back. Moreover new financial instruments were used, like CDOs, which made this situation even more critical. Additionally these CDOs caused a fast spread of the crisis in the whole world.

This crisis led to huge troubles over the whole world, also in Europe. One result was that Greece went nearly bankrupt. As a result many people lost their trust into the Euro as they expected a Grexit. Many people who possessed Euros were looking for ways to invest their money into assets which were regarded as safe such as real estates because they were also afraid that the Euro would suffer under the Grexit.

People then realized that real estates in Austria were perfect to invest in as these were very secure and as prices were increasing. Austrian real estates were back then generally speaking very cheap as there had been an atypical trend in the years before the crisis, i.e. real estate prices in Austria had not increased during the time period before the crisis. Especially real estates in Klosterneuburg were very coveted as they were relatively cheap and not too far away from Vienna.

Summarizing the collapse of the real estates market in the US created a crisis which also caused a run on real estates in Klosterneuburg. This is supported by the fact that mainly own money and not credits was used to buy the real estates.

## **4.2 Evaluation and errors**

While analysing the collected data it became obvious that uncertainties needed to be minimized. This could be done by collecting even more data, which in this very case was very hard to gather.

Another thing that came up was that it was not possible to say precisely how the real estate market in Austria would have developed without the crisis. Yet experts argue that there would not have been such a big increase and people would most probably not have used their own money but mainly credits.

## Part 5:

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## 6 Appendix

During the research process of this Extended Essay interviews with two local real estate agents were conducted. Below are listed those questions of the interviews as well as relevant data gained from these interviews.

The two interviews were carried out on October 10<sup>th</sup> 2014 (Kommareal) and on October 15<sup>th</sup> (Svatek)

Question1: How did the real estate market in Klosterneuburg develop since the start of the financial crisis 2007? Was there a run on real estates?

Huber: There was a steady increase of real estate prices in Klosterneuburg of at least 5%. So one could call it a run on real estates.

Stern: Prices were increasing rapidly in Klosterneuburg, yet as real estates became more and more expensive, a new trend was created. Nowadays people are looking for real estates which are even a bit more away from Vienna as they are cheaper. So there was a clear run on real estates.

Question 2: Why were people investing in real estates in Klosterneuburg?

Huber: At the beginning people were investing in real estates in Vienna but as the supply was very limited and the demand quite high, prices were increasing enormously and people were moving to areas which are close to Vienna, such as Klosterneuburg for example.

Stern: The real estate prices in Klosterneuburg had been stable for years, which was quite atypical as prices nearly everywhere else had been increasing. As a result prices in Klosterneuburg were relatively cheap in comparison with other real estates. This was one reason why people were buying real estates in Klosterneuburg.

Question 3: How can someone tell that the run on real estates was caused by the crisis?

Huber: As many people were using their own capital and not credits to buy these real estates it is obvious that people were trying to secure their own money as a result of the crisis.

Stern: People were using mainly their own money to buy real estates. So they did not want to possess Euros or gold as no one knew what would happen. So they bought real estates as they were regarded as safe.