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The effective functioning of the real estate market is by far one of the most important priorities of the country, which predetermine the processes of formation of small and middle class in Ukraine. And the general development of property in its content is the main component of the needs of the population, which has an impact on the overall level of investment efforts, volumes of accumulation and consumption in the state.

Today, the issue of in-depth study of the stages of formation of the residential real estate market in Ukraine, as well as its economic, historical, and social characteristics, is relevant. After all, the actual situation of the housing market is rather unstable and is characterised by inability to self-regulate. It is known, that during the time of the centralised and planned economic system implemented by the Soviet Union, the state itself assumed responsibility for providing housing to the population. The state in the residential sector acted as the main investor in the construction industry, served as a developer and contractor, and most importantly – it was the owner of the vast majority

of residential properties.

The process of obtaining residential property by the population was carried out on a free basis through participation in the formed queues for residential real estate, which conversely was conditioned by the need to formulate clear rules for providing housing to the population [8]. In connection with the acute need for limiting the living space, its norm for one person was set, which was equal to almost 14 square metres.

During the times of the USSR, the state exercised the function of providing housing to the population, the formation of the real estate market in Ukraine began only in the nineties of the last century after the proclamation of Independence and when the process of market mechanisms implementation on its territory was launched. Ukraine, while in transition, was not able to make the necessary investment measures on its own. At that time, the problem faced by the state was the invention and implementation of an innovative model of the functioning of the housing sector, as well as the introduction of new financial and investment models for the provision of the construction industry.

Today, in Ukraine, the study of the process of emergence, formation and functioning of the real estate market is at initial level. In turn, as the analysis result of research materials and publications on the subject has proved, it is obvious, that certain achievements of leading domestic and foreign scientists have already been made in the direction of studying issues related to mortgage lending, assessment of residential real estate objects and price formation on them. The respective scholars are: A. Asaul. O. Hrytsenko, P. Yeshchenko, I. Malii, R. Mann, J. Mantsevich, K. Palyvoda, V. Pavlov, N. Pogoreltsev and others. At the same time, the study of the cyclical processes of formation and development of regional markets for residential real estate has not been carried out in full.

The formation of the legal basis for the realisation of real estate transactions commenced with the adoption of the Law of the Ukrainian SSR "On Property" 697-12 of 07.02.1991 [2]. Adoption of this draft law created the conditions by which citizens could own immovable property on legal grounds. As a result, there appeared such concepts as: market actors; functions of the real estate market; real estate market; the structure of the real estate market, etc. Next, on June 19, 1992, the Verkhovna Rada of Ukraine passed the Law "On Privatization of the State Housing Fund", which contributed to the creation and organisation of a new professional layer of qualified real estate market participants,

namely real estate companies and real estate agencies.

In order to regulate the relations of the real estate market in Ukraine, the following stage in the process of its formation was the establishment of legal principles, which allowed to finally creating the real estate market in our state. The following normative legal documents were adopted: Law of Ukraine "On Commodity Exchange" No. 1957-12 dated December 10, 1991. [5]; Family Code of Ukraine №2947-3 of 10.01.2002 [15]; Commercial Code of Ukraine No.436-4 of 16.01.2003 [1]; Civil Code of Ukraine No. 435-4 of 16.01.2003 [19].

In general, despite the adoption of the aforementioned legal acts, there was a need for adoption of a number of draft laws, as the level and rates of real estate market development remained low. This situation was caused by inflation, a decrease in household incomes, a reduction in gross domestic product, and an increase in unemployment rates in the country.

In order to characterise the situation in the residential real estate market, as well as based on indicators of the level of initial prices and their dynamics, the number of real estate transactions, price dynamics, the level of competition, probability and weight of risks, indicators of demand and supply, legislative provision, quality of the Real estate and real estate market relations with the financial market of the state, we have identified and grouped the following stages and stages of the formation of the residential real estate market in Ukraine (table 1.18, 1.19).

-1991 - 1993 – this was the stage of formation of the residential real estate market in Ukraine. Prices for residential properties themselves, as well as the quality of the latter, were at the lowest possible level. This was especially noticeable as a result of their comparison with similar real estate objects in European countries.

At this stage of the real estate market, there was a one-time increase in the number of investment measures by the state in the field of construction. One of the main factors that had an impact on the real estate market was the development of entrepreneurship and significant migration processes both in the middle of the country and beyond. In practice, during this period, there was also markedly tangible rise in real estate prices, an increase of which was about 50-100% per year, which resulted in a steep increase in demand for them.

- 1993-1995 – since at the end of the previous period the maximum possible rates of increase in prices for real estate were noted, then at this stage there was their gradual decrease.

Table 1.18

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MARKET CYCLES	FIRST CYCLE			
ESTABLISHMENT	Ι	II	III	IV
STAGE				
MARKET	1991-1993 ys.	1993-1995	1995-1998	1998-2000
INDICATOR		ys.	ys.	ys.
Initial price rate	Maximally	High	High	Low
	low			
Operations number	Extreme	Moderate	Steady	Low
	growth (huge)	growth		
		(moderate)		
Price dynamics	High growth	Moderately	Stabilisation	Price
	rates	high growth	and	decrease
		rates	beginning	
			price	
			decrease	
Demand and supply	Significant	Prevailing	Prevailing	Equilibrium
	preponderance	demand	demand	of supply
	of demand	supply over	supply over	and demand
	over supply	demand	demand	
Legislative support	None	Insignificant	Partial	Partial
Quality	Low	Low	Acceptable	Acceptable
The level of	Low	Low	Moderate	High
competition				
Risk level	High	High	Moderate	Moderate
Interconnection of	None	Scarce	Scarce	Scarce
the real estate market				
with the financial				
market				
Phase of the cycle	Revival	Stagnation	Revival	Stagnation
		(crisis)		(crisis)

The Cyclical Character of residential real estate markets formation in Ukraine: the first cycle [8; 9; 20]

At the same time, indicators of the growth rate of dynamics of real estate prices amounted to about 30-50%. The Law of Ukraine "On Privatisation of the State Housing Fund" came into force, the appearance of which contributed to the legalisation of the vast majority of transactions with real estate. In this period, the process of market formation continued [6].

- 1995-1998 – this time period was marked by a decrease in the growth rates of real estate prices compared to the previous period and by the general price stabilisation. This was partially due to the satisfaction of the population's demand for housing.

Unconditionally, the leading indicators of real estate prices were noted in the city of Kyiv. And then, as in the most expensive cities after the capital – Odesa and Lviv, prices were almost twice lower and

Table 1.19

the second cycle [8,9,20]					
MARKET CYCLES	SECOND CYCLE		THIR	D CYCLE	
ESTABLISHMENT STAGE	V	VI	VII	VIII	
MARKET	2001-2004	2004-2009 ys.	2010-2014	2014-2017 ys.	
INDICATOR	ys.		ys.		
Initial price rate	High	High	Low	Low	
Operations number	Moderate growth (moderate)	Extreme growth (huge)	Moderate growth (moderate)	Stable growth (stable)	
Price dynamics	High growth rates	High growth rates	Prices decrease	Stabilisation	
Demand and supply	Significant preponderanc e of demand over supply	Significant preponderance of demand over supply	Equilibrium of supply and demand	Equilibrium of supply and demand	
Legislative support	Formed	Improvement	Improveme nt	Improvement	
Quality	Developed	High	High	High	
The level of competition	High	High	High	High	
Risk level	Low	Low	High	Moderate	
Interconnection of the real estate market with the financial market	Organisation of constant interaction	Constant interaction	Organisatio n of constant interaction	Organisation of constant interaction	
Phase of the cycle	Peak (growth)	Decline	Revival	Revival	

Cycle of the formation of residential real estate markets in Ukraine: the second cycle [8.9,20]

amounted to about 200-250 Dollars. USA. At the same time, the lowest real estate prices were in Kirovograd and amounted to about 100 US Dollars per square metre of total area.

Nowadays, the above mentioned level of prices is not high, reflecting the purchasing power of the population. We also note, that at that time there was hardly any lending to banks under various mortgage programs [18].

It should be noted, that due to the adoption of the Resolution of the Verkhovna Rada of Ukraine "On State Monopolisation of the Economy and the Development of Competition", the Decree of the President of Ukraine "On the Establishment of the Interdepartmental Commission on Demonopolisation of the Economy" and the Law of Ukraine "On Protection against Unfair Competition" there was a partial regulation of the competitive fundamentals of coexistence of the real estate market participants in Ukraine. [7; 13; 14].

- 1998-2000 – in this period, there was a sharp decline in prices for real estate, resulting in almost decreased by half number of transactions in the real estate market. This situation was caused by the inflationary processes that struck the market in the late 1999 and early 2000s, as the inflation rate and consequential devaluation of the national currency significantly exceeded market prices for real estate.

In general, as a result of crisis phenomena, the level of prices for real estate returned to the indicators of 1995, and as a consequence, the market was in a state of depressive stabilisation processes. All this conditioned in the future a significant recovery in demand for real estate, but thus an increase in the volumes of the market itself, because it was by such actions that people could protect their savings from inflation.

- 2001-2004 – as a result of the situation in the real estate market at the end of 1999, this period was marked by the onset of a new stage in the formation of the market – the beginning of a long-term growth of the market price for real estate. The constant increase in demand for real estate, as well as rising prices, contributed to the new stage of market development. At that time, an increase in the intensity of the development of the primary residential property market and the expansion of the market infrastructure boundaries was noted.

First of all, it is connected with the increase of the level of solvency of the population, the accelerated development of the market of primary residential real estate, the constant improvement of the legislative framework by state authorities, a tangible competitive game among professional market participants, and also, due to the adoption of the Law of Ukraine "On Mortgage" by the deployment of Ukrainian banks of a wide range of mortgage lending programs [4]. In addition, as a result of the disaster of 11 September 2001 in the United States of America, the public's concern about the reliability of the US currency was caused by a significant shift in capital towards the real estate market.

- 2004-2009 – as a consequence of positive changes in the country's economic processes, there was a significant increase in the indicators of demand from the population for real estate, which contributed significantly to the development of the construction industry and investment processes for its promotion. It should be noted that along with the increase in the volume of construction of real estate objects, their quality was also significantly improved. New methods and technologies of construction were introduced. Objects with a large area of apartments began to be built, and the houses themselves to be built on

a monolith-frame principle. Mansions, townhouses and club houses conspicuously came about in the market. Personalised residential complexes replaced single-dwelling houses.

This period, due to the high level of the population demand and the impact of various taxes, economic and political factors, was marked by a significant and steady increase in the level of prices for real estate. In 2006, the total indicator of the realised construction products amounted to 71.9 billion UAH, which is almost five times higher than the same indicator in 2000. There was also an increase in: the number of commissioned real estate objects and the level of investment in housing construction [18].

Later, the real estate market in the country was engulfed in collapse, because the opposite trends in their content were traced – namely, a constant expectation of a decrease in real estate prices, on the one hand, and also a further and endless increase of prices, on the other hand. A rise in competition between commercial banks in the mortgage lending market came about. Significant access to borrowed funds and a steady increase in prices for residential real estate determined its availability among other alternative investment attractive ways, which resulted in a significant increase in the level of speculative component in the market.

The following factors contributed to the growth of property prices: steadily rising land prices; constant inflationary processes in the state; the inability of the primary real estate market to expand exponentially; a large number of speculatively interested market participants; limited financial instruments to attract additional investment resources to the construction market and estate renovation [8].

It should also be noted, that even under the conditions of active increase of the volume of construction in the state, it was not possible to satisfy the demand for the real estate market, which at that time existed on the market. As the indicators of population security were about 20 square metres per person, while the figure in Europe was 46 square metres. In addition, a quarter of the Ukrainian population at that time lived in residential premises with a low level of technical conditions and unsatisfactory operational qualities.

In turn, the decline in the price level for real estate was facilitated by: the impossibility of financial institutions to satisfy financial investment market needs; psychological "fatigue" of consumers from constant increase in prices for real estate; low level of independent solvent demand in the market; the emergence of a large number of analytical studies with basically controversial results of research. As a result of economic and social contradictions regarding the future of the real estate market in Ukraine, there was a decrease in the number of real estate transactions, as there was absolute confusion for all actors in the market. After that there was a "subsidence" of the market. Real estate prices have dropped almost twice, and incomes of the population by one third, which caused the first panic in the market. Mortgage lending programs were stopped, as borrowers became insolvent under existing loan agreements, and the volume of outstanding mortgage loans significantly exceeded the real value of purchased real estate. There was an instant decrease in demand for unfinished objects.

Therefore, the main reason that determined the situation on the market in this period was increased speculative interest in real estate. In addition, at that time there was an artificial restraint of competitive relations between construction organisations and the continuing complication of the process of drawing up land rights with its further development purpose.

- 2010-2014 – at the beginning of this phase, the state's economy was in a state of complete recession. The activity on the real estate market was at a negligible level, and market prices for real estate objects continued to decline. In the absolute absence of lending to financial institutions, the construction of new real estate objects was stopped, and real estate transactions took place mainly for the purpose of changing the place of residence, or improvement of living conditions of the population. However, over time, the authorities managed to reduce the discount rate of the National Bank and stabilise the national currency, which gave a new impetus to the shift in the financial sector in the country, with which, albeit not to a large extent, but bank lending programs were restored. This allowed resuming financing for the construction of unfinished real estate that had a rather high level of readiness, and eventually new potentially reliable construction projects. These measures to activate the construction industry allowed increasing the number of new housing in the market.

Thus, the changes that took place in the mortgage lending and project financing market generally contributed to the activation processes of the development of financial and investment activity in the construction industry of the state.

Gradually, the solvent demand of the population began its growth. It should be mentioned, that some kind of reorientation of the housing construction market of Ukraine towards the objects of the economic class took place, namely those with a reduced area. This allowed for a significant increase in demand in the market, because by reducing the total area of ready-made objects, it was possible to reduce prices for them. Consequently, the real estate market began to rise, as evidenced by an increase in real estate volumes [8].

Moreover, a positive impact on the development of the market was made by the adoption of the Law of Ukraine "On Amending Certain Legislative Acts of Ukraine on Improvement and Simplification of the Procedure for State Registration of Land Plots and Real Property Rights to Real Estate" [3]. In accordance with its edition, the right to register the rights to real estate, in addition to the Technical Inventory Bureau, was received by notaries and Ukrainian State Register. The Resolution of the National Bank of Ukraine, which, to a certain extent, has a negative impact on the general situation in the real estate market, should also be mentioned. After all, in accordance with its content it is prohibited to carry out operations with the use of cash for an amount exceeding UAH 150 thousand. As a result, there is almost twofold reduction of real estate transactions in the secondary market [12].

Besides, in our opinion, the "weak movement" in the real estate market was influenced by the following factors: the constant expectation of "subsidence" of the course of the national currency; political instability; general economic situation in the state; the impoverishment of the middle and small classes in the state; reduction of loan programs for developers, as well as their expectations for market stabilisation.

- 2014-2017 – when analyzing the formation of the real estate market in this time period, the significant hryvnia depreciation relative to Euro and US dollar, which took place in early 2014, should be highlighted first. It was caused due to the transition to market conditions for the formation of the price of the national currency, the so-called "floating rate".

This factor significantly complicated the conditions for attracting additional investment funds to the real estate market. Although, even under such conditions, the market is experiencing recovery, as well as the gradual restoration of various credit programs by banks, which facilitates the real estate market in the state.

In general, studying the nature of any market, and especially the real estate market, particular attention should be paid to the cyclical nature of the recession and the rise of its main indicators. This is evidenced by the world-wide practice of market research. It is known, that in order to understand the maturity of the market, or the stage at which it is located, it is necessary to determine its cycle. In advanced economies and those with the emerging real estate market, the cycle is about 8-9 years. The cycle length is normally a period of time, when the markets itself, as well as the whole economy of the state, are in the process of development [20].

The volume of the real estate market is reflected in demand and supply indicators, and the intensity of the relationship between them shows the vacancy rate. Meanwhile, the dynamics of the scale of the supply is marked by a "delayed effect" compared to market demand, since the latter is more flexible in line with the dynamics of market prices.

Pricing in the market for residential real estate is carried out in proportion to demand and inversely proportional to the supply. The change in the number of transactions with real estate objects to a certain degree characterises the phase of its actual market activity and entirely depends on demand indicators. Meanwhile, the time of the exposure indicator explicates the level of liquidity of the market, and has reverse connection with the change in demand (table 1.20).

Table 1.20

	Market Cycles			
	Ascent Period		Decline Period	
Indicators	Recovery Phase (Revival)	Expansion Phase	Contraction Phase	Recession Phase (Stagnation)
Demand amount	A		▼	▼
Supply amount	•			▼
Vacancy rate	▼	▼		
Sales prices	•		V	▼
Rent			V	•
Capitalisation rates		•	•	•
Number of transactions		•	•	▼
Absorption rate			▼	▼
Exposure time	V	▼		
N	• •	— 1		

Market conditions for residential real estate: phases, periods, cycles

► – stabilising; \blacktriangle – increase; \blacktriangledown – decrease.

Source:: formed by the author on the basis of the reference - [18]

Analysing the scale of the market as well as its activity and profitability makes it possible to identify the problems and features typical of the real estate market, as well as to make projected calculations for its further development. Since 2010 Ukrainian real estate market has been in the third cycle of its existence, since the first cycle of the market comprised the period of 1991-2000 and lasted for 10 years.

During the first cycle, the real estate market "survived" its initial stage of formation, development and dynamic pricing, the process of redistribution of property, privatisation processes and the beginning of the formation of a regulatory and legal basis.

While staying in the second cycle of formation in the period of 2001-2009, which lasted for 9 years, the real estate market in Ukraine can be characterized by rapid development, intensive increase in prices for real estate objects, as well as high intensity of construction of new real estate objects.

Today, while the market is in the third cycle of its existence, there are stabilisation processes in the real estate market, a consistent increase in real estate in the secondary market, as well as a large number of construction sites that are actively erecting new real estate objects. All this testifies to the stabilisation course of the market development and its active revival.

In our opinion, today it is necessary to introduce a system of economic, financial, organisational and social processes that would allow balancing the volumes of demand and supply in the residential real estate market in Ukraine.

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