Housing finance in Ukraine: a long way to go

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1. Introduction

Besides current events attracting the world's attention to Ukraine, there are several reasons for economists' interest in the country. Ukraine is the second largest transition country having a land area of 603,700 sq. km, larger than Metropolitan France. Ukraine has a population of 45.3 million (2013 average) and a GDP comparable to Norway (Word Bank Indicators, 2014). The transition process in Ukraine was characterized by an extremely large initial shock and a fairly slow recovery. The country's real GDP declined by more than 60% in the 1990s and has not reached the pre-transition level since then, making the transition process highly attractive for post-soviet countries researches as an experimental model.

There is a big gap in knowledge on housing and housing finance in Ukraine, and the aim of this article is to shed some light on the subject. Recent changes in the overall economic situation in Ukraine have deeply affected housing finance. In Spring 2014 a 40% depreciation of the national currency[1] drastically reduced the chance for mortgage borrowers to make payments on dollar and euro mortgages which accounted for 2/3 of mortgage debt before the exchange rate jump. Although mortgages are not widespread in Ukraine, the repossession of property mortgaged to banks and the cost of housing expressed in dollars could devastate the sector. Given the bleak outlook, there is an urgent need to rethink the funding model and to identify new solutions.

At this point we should draw attention to the two-fold role of housing finance, as it is understood in transitional economies, contrary to that in developed ones (Stephens, 2005; 2014). In the 'western' sense the housing finance system functions to facilitate, or hinder, labour mobility by helping people to get a dwelling; either buying or renting it. In Ukraine support for vulnerable groups to obtain housing is mainly understood as a social security payment for rent and the cost of communal services such as heating, water supply etc. Such support is provided via means testing regardless of the type of tenancy – either homeowners or social housing renters can apply for it. Ukraine has a most generous well-functioning housing allowance system: all costs in excess of 15% of household income are reimbursed, and for households with children or pensioners the threshold is 10% (Ministry of Social Policy, 2014). There is also a privilege program for certain categories of people with disabilities, veterans, etc., who are provided communal services at a reduced price; this program is not targeted at the poor.

The disparity between having the highest average costs for supplying gas and the lowest residential gas and heating tariffs in Europe, at 40% of those in Poland and 40% of those of the Baltic countries, is leading to huge inefficiency in energy usage; 10 times more intensive than OECD average. This was underlined in 2013 World Bank research (World Bank, 2013). Estimating the direct budgetary and quasi-fiscal subsidies on gas and heating as 7% GDP in 2012, the research provides the conclusion that a gradual increase in energy tariffs coupled with better targeted social assistance is vital for Ukraine's budget and energy security. Detailed justification of a need for a tariff increase based on micro data was provided five years ago (Fankhauser et al., 2008). However, the tariff was not changed for the past 10 years until it was increased dramatically in Spring 2014. Although housing allowances will support the poorest households within the social norms of consumption, more expensive utilities for consumers promise that the coming winter will be a challenging one.

In describing the progress of housing affordability and the housing finance transformation since 1990 we will offer an overview of the prospects for future development.

There are two reasons for this unusual two-fold role of housing finance. First, the governance and management system is extremely inertial. In Soviet times housing was constructed and provided by government, the cost of rent was symbolic for households, therefore housing costs predominantly consisted of communal services payments. The housing sphere was run by the Ministry of Housing and Communal Services and the role of government in 'providing decent housing for reasonable cost' was understood as the provision of water, electricity, heating supply, including electrical networks and water and sewer pipes maintenance, together with direct assistance to poor households over payments. Since then the ownership structure in the housing utilities sector has changed, housing become mostly private. However, the Ukrainian Ministry for Regional Development, Construction, Housing and Communal Services is functioning (Ministry for Regional…, 2014) and affordable housing beside its 'western' meaning has been still widely understood in Ukraine as affordable cost of 'communal services' for the households. This socially sensitive area has always attracted attention before an election and the idea of affordable communal services always appears in political debates.

While mortgage credit problems and direct need for housing concerns only a small proportion of Ukrainians, the 2014 Spring increase of tariffs for housing and communal services has reduced the affordability of comfortable housing for all the population. A partial answer from government was additional funding for housing allowances, targeted at poor households with incomes under subsistence level. The program

1 Figure 1 Average living space area (LHS) and number of households in a waiting list for housing (RHS).

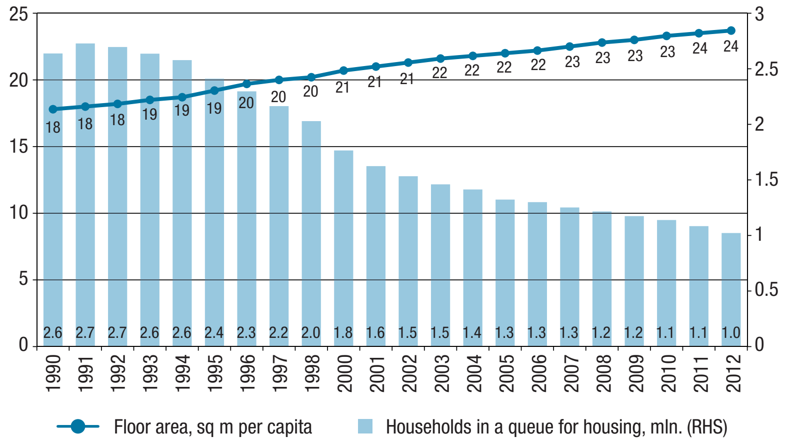
is expected to cover up to 4.5 million Ukrainian families, or 30% of the total population, while only 1.4 million households (almost 5 million people or 11% of the population) had benefited from the program before (UNIAN, 2014). The consequences of old water pipes and wiring, obsolete units now worn out, low energy efficiency of housing and poor management are still making affordable decent housing in Ukraine a basic need still to be satisfied as part of the progress of human development (Stiglits et al., 2009; Human development, 2012).

Housing provision is one of the crucial socio-economic characteristics of a country. All governments share the objective of achieving adequate and affordable housing for their citizens, including in Ukraine. The 'right to housing' in the United Nations Declaration of Human Rights expresses the general aim of housing policy. However, government does not necessarily take direct measures to achieve it.

It should be underlined that in Ukraine despite the huge increase of housing per capita stock for the post-soviet period from 17.8 sq.m to 23.7 sq.m per capita, the living conditions are still worse than those in European countries (Eurofound, 2012; Derzhstat, 2014). To a great extent the growth has been caused by a population decrease from 51.8 million persons in 1990 to 45.6 million in 2013. This component accounts for 42% of the housing per capita increase. Nevertheless, there is still a queue of about a 1 million households waiting for housing (Figure 1). Ukraine faces a problem of providing people with decent and affordable housing.

Looking back twenty to thirty years one can conclude that housing has been constantly on the agenda in Ukraine. In the Soviet Union housing was mainly constructed and provided free of charge by the state. However, in the mid 1990-s when the old system was broken and total economic downturn and lack of funding led to a sharp reduction in housing construction, the main idea of housing policy was to enable the market to work as in other former socialist countries. It is well known that privatisation in Eastern and Central Europe is associated with political regime changes (Lowe, Tsenkova, 2003; Tosics, Hegedüs, 2003; Buckley, Kalarical, 2005). On the one hand the process is interpreted as a political shock absorber and a tangible step to citizens. However, on the other hand ownership transfer to the population is driven by the high cost of maintenance and repair as an excessive burden on the new regime.

Figure 1 **Average living space area (LHS) and number of households in a waiting list for housing (RHS)**



Source: State Statistics Service (Derzhstat) data

Homeownership in Ukraine was free of charge and strongly encouraged by government and now Ukraine belongs to a group of countries with very high homeownership – 93.7% of the housing stock[2] was private in 2013. For the last five years the situation has not changed much, and the main flow of privatisation occurred in 1995-2005, when the privately owned share increased from 62% to 89%. It is worth noting, that privatization in Ukraine is a totally urban phenomenon, whilst in rural settlements housing was dominantly private before, and since 1995 the change has been small; from 92% to 98.4% now in rural areas. On the contrary the share of private housing in cities and towns increased from 44% to 91% for the period 1995-2013.

Settlement pattern is very important for analysis of the affordability of housing, since the housing market is extremely place specific. In big cities not only is the income higher, the work opportunities are greater and more attractive for labour migrants, but also real estate is more expensive. While 69% of the population of Ukraine is urban, 20% of all urban dwellers live in four big agglomerations – Kyiv (2.8 million population), Odesa (1.0 million), Kharkiv (1.5 million) and Dnipropetrovsk (1.0 million). Another 12% of the urban population of Ukraine lives in five smaller agglomerations with populations of 500,000 – 1 million; and the majority of urban dwellers live in cities and towns with a population less than 500,000 people. House prices in big cities are the benchmarks of the housing market changes over the transition period.

2. House prices: dynamics and prospects

In the early 1990-s at the starting point of the housing market development in Ukraine, the commercial value of apartments was at a minimum historical level. In the capital city Kyiv with a 2.8 million population, the price of a studio apartment was about 8,000 US dollars; one-bedroom apartments cost 12-13,000 USD and two-bedroom 17-18,000 USD. In Odesa, a one million population city on the Black Sea in the south, studio apartments cost about 5,000 USD, one-bedroom apartments – 7-8,000 dollars, two-bedroom – 12,000 dollars. In Kharkiv, a 1.6 million population city in the eastern part of Ukraine, prices were even lower: 4,000 dollars for a studio, 6,000 dollars for a one-bedroom and 8-10,000 dollars for a two-bedroom apartment. In 1994 there was a significant increase in apartment prices in the cities of Ukraine, but after the mid-90s they grew very moderately and by 1998 housing prices had virtually stabilized.

Because of the crisis of 1998 and a sharp decline in the exchange rate of the hryvnia [UAH] against the dollar, when the dollar's value increased from 1.5 UAH to 5.5 UAH, the cost of

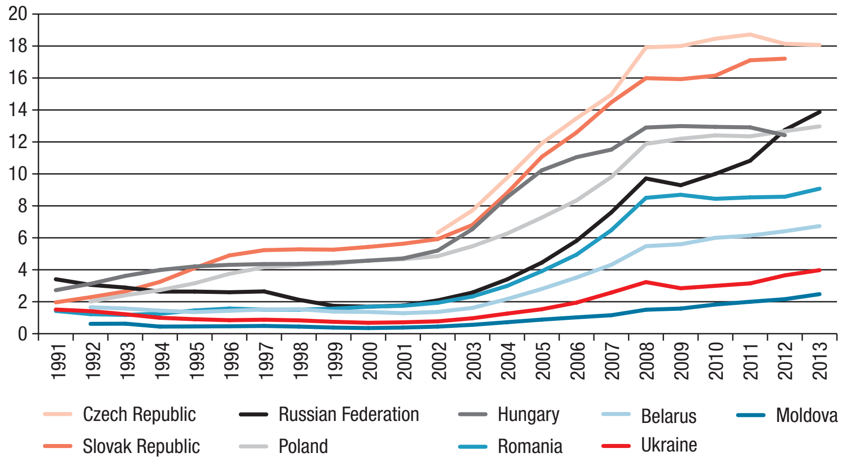
2 Per cent of total floor area of housing.

apartments in Kyiv, Odesa and Kharkiv almost simultaneously fell by half. During the period 1998 to 2001, there was a serious downturn and afterwards stagnation in the sales of real estate, including apartments. The unfortunate events of September 11, 2001 sharply intensified the housing market; the excessive demand led to an unprecedented increase in the cost of housing. It should be noted that after the collapse of the Soviet Union the banking sector had lost all credibility since all bank savings of the population were actually annulled. The population in the 1990s usually saved in foreign currency in cash, and after 11th of September there was a huge investment of accumulated savings in real estate or other safer assets.

In Kyiv the studio price was 120-130,000 dollars, the one-bedroom price was about 150,000 dollars, and a two-bedroom apartment cost 200,000 USD. In Odesa the prices were 80,000, 100,000 and 130,000 dollars, respectively. In Kharkiv, a studio cost about 60,000 dollars, one-bedroom apartments 70-80,000 dollars, and a two-bedroom apartment – 100,000 dollars.

In the mid 2000-s prices had stabilized and until the financial crisis did not change much. In 2008 the dollar's value increased from 5 UAH to 7.7 UAH, and depreciation of the hryvnia against the dollar caused the decline of apartment prices in USD. We will describe in detail current housing prices and affordability of housing, including its regional disparities, further. Viewing the situation at the end of 2013, based on the situation in the property market in Ukraine, we could anticipate its stagnation. Analyzing the long-term forecast for housing prices in Ukraine until 2020, we could not see any clear trend going up or down. Under the influence of situational factors, the cost of apartments was anticipated most likely to remain unchanged, with minor variations. Prices in the second-hand housing market can decline in response to downward demand fluctuations, although, in the new-build housing market reduction is less feasible due to continuously rising prices for building materials and the growing cost of construction labour. The considerable changes of the last few months have made the future of housing finance dependent on the overall economic situation and on government adjusting housing policy to it.

Figure 2 Gross national income, converted to U.S. dollars using the World Bank Atlas method of Ukraine and neighboring countries in 1991-2013



Source: World Development Indicators

3. Affordability of housing

With the huge housing deficit and with only a rudimentary social housing sector, the main obstacle to better housing in Ukraine is low household income. As could be seen from Derzhstat statistics, during the transition period the real wage in Ukraine grew from USD 50 (UAH 90) per month in 1996 to about USD 100 (UAH 525) in 2004 and USD 316 (UAH 2517) in 2011, and in earnings terms Ukraine is still far behind European countries. To illustrate relative income in alternative measurements for international comparison, let us refer to the Big Mac Index (Economist, 2014), based on the theory of purchasing-power parity. In July 2014 the under-valuation of the Big Mac in Ukraine is the highest among all countries[3]. The effect is partially caused by a 50% increase in the official hryvnia exchange rate over the last months; however, in the 2013 currency comparison there was still a 50% under-valuation of the Big Mac. Therefore, we can conclude that Ukraine permanently belongs to a group of countries with relatively low income.

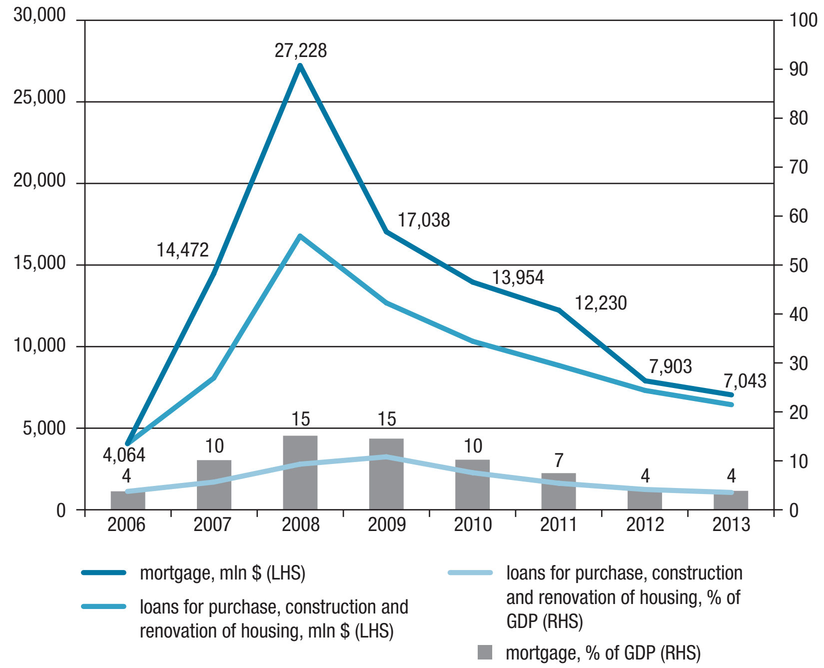
According to the World Bank classification, Ukraine is in the lower middle income group of countries (Sachs, 2014). In 2013 the per capita gross national income of Ukraine reached 3,960 USD – almost the threshold for the upper middle income group, which is 3,976 USD per capita. The dynamics of gross national income of Ukraine and neighboring countries (Figure 2) illustrate that they have diverged dramatically since 1991 and the country has performed really poorly. The income of 9% of the population is below the subsistence level (absolute poverty measure), 25% of citizens can be classified as relatively poor having equivalent income below 75% of the median level (relative poverty measure) (Social outcomes, 2012). Without sufficiently stable high earnings people cannot afford to buy a house or a flat even when housing finance programs give the support. Low household incomes coupled with high prices are the main obstacles to better housing in Ukraine.

Despite the fact that for 40% of households the floor area of their dwelling is below the 13.65 sq. m norm and in big cities the proportion of households reaches 48%, only 15% of households are not satisfied with their housing in cities and 20% in rural settlements (Derzhstat, 2014). Therefore, this supports the idea that in Ukraine the prevailing housing standard of the population is low – the same conclusion is reached by one of the authors for Russia (Burdyak, 2014). For the families, who cannot afford the purchase or construction of new housing and for whom the affordability of payments for rent and communal services becomes the first violin [plays the main role] in housing, mortgage finance remains a distant reality, even if market-based finance is available. Most of the poor households will get very little direct benefit from the development of housing finance; to meet their housing needs the idea of social housing should be revitalized, revised and implemented.

3 The Big Mac Index, The Economist, 28.07.2014 http://www.economist.com/content/big-mac-index

Ukraine has a number of government housing programs (The Ministry for Regional Development, 2014). 'Own House' has operated since 1997 and supports individual housing construction and connection to a piped gas supply in rural areas by preferential loans at 3% per year: it has 100,000 participants. In 2002, the 'State housing program for Youth' started, it also provides cheap housing loans, has covered 7,000 young families and has been extended until 2017 with expected participation from 17 thousand young families. Since 2012 government financing of affordable housing for those from the waiting list goes through two sources: the Affordable Housing Program 30/70, under which the state pays 30% of the cost of construction, and the citizen pays the remaining 70%; and mortgage loans at a reduced interest rate of 16% per year, of which the citizen makes payments at 3% interest rate and the state provides the remaining interest payments every year. Government housing programs do support housing construction, but they are not sufficient; they cannot help very poor families who are not able to afford to participate in any co-financing of new housing. Currently the financing of affordable housing programs in Ukraine has been suspended.

Figure 3 Size of mortgage debt and housing loans in million $ and as % of GDP of Ukraine



Source: Author's calculations based on State Statistics Service (Derzhstat) data

The problems created by the low official wage are to some extent weakened by shadow income and informal employment – the phenomenon is quite common for other transition economies (Gimpelson, Kapelyushnikov, 2014). While there are different views of the scale of the informal sector in Ukraine, some of them suggest that in the early 2000's it was up to 50% of GDP. The involvement in informal work is estimated at about 25% of the work force, including 10-15% of employed people who work only on informal jobs and others who are combining formal and informal work (Commander et al., 2013). When we take all the people involved in agricultural production, informal employment jumps to more than 60% of the work force in Ukraine. Other authors revealed the share of non-standard employment to be 27.5% in 2010 (Kupets, Vahitov, Babenko, 2012). People who have under-declared income from informal employment are directly supporting their relatives. Labour migrants working abroad receive three times more salary than their counterparts at home, and not only send money to their families in Ukraine, but also buy, or build, housing for themselves, or their children here. In most cases social support and protection come from family and through intergenerational support, not from institutions. In reality, in Ukraine the older generation of parents is supporting their children and grandchildren in difficult situations, especially in cases of unemployment or temporary or casual jobs. They help their children much more often than children can support and help their retired parents. This is because pensions are paid on time and in full, pensioners' monthly expenditures are usually much lower, and there is no need for additional housing, as there often is for young families. De-shadowing the economy and legalizing all earned income would make a contribution to the official level of income, to housing affordability and the availability of mortgages.

Mortgage finance has quite a long history in Ukraine. Ten years ago the State Mortgage Institution [SMI] was created (Concept, 2004), therefore banks were already providing mortgage loans. In the National Bank of Ukraine Statistics mortgage loans have been reported since 2006, at that point they counted for 25% of all consumer loans and mortgage debt was 3.8% compared to GDP (National Bank, 2014). To avoid ambiguity we should underline the difference between two notions presented in National Bank statistics. If ownership of the housing, including that under construction, or any other real estate ownership acts as loan collateral[4], the loan is called a 'mortgage' regardless of the purpose of lending. Conversely, in the statistics there is a reference to all loans for purchase, construction or renovation of housing without any reference to loan collateral, and strictly speaking mortgage loans are at the intersection of the two. In 2012 the definitions became very similar; nevertheless, for 2006-2013 we present both categories (Figure 3). Consumer debt on mortgages was at its maximum in 2008-2009, however it did not exceed 15% of GDP; housing loans had reached not more than 11% of GDP. Further, in regional analysis of mortgages, we refer to a 'housing loans' category following the Independent Association of the Banks of Ukraine practice (Independent Association, 2014).

The role of the SMI in overall provision of credit has been negligible, a maximum 1-2% of loans were refinanced by the SMI every year; a total of 8500 mortgages were SMI supported from 2005 till the end of 2012. However, the

4 In case of several collateral instances real estate ownership should be the maximal component.

Institution fulfilled well its role as a development institution after the 2008 financial crisis, rescuing construction projects with frozen funding and supporting banks. At that time the SMI supported mortgage rate was 7.5-8.5% points less than on other mortgages and the SMI refinancing rate was a landmark for the sector. In November 2012, Ukraine was advised by international financial institutions to equalize the cost of borrowing from SMI to that from the Ministry of Finance on its way to meeting the European standards. It was a huge drawback in housing finance development. The SMI refinancing rate jumped from 11% to 18% and all the advantages of the Agency were lost. Now the rate on SMI joint mortgages is only 0.5-0.8% less than for other mortgages with more restrictive requirements in relation to borrower income and the terms of the loan.

According to the SMI, a standard mortgage is only in UAH, maximal loan-to-value ratio is 75% and monthly payments should not exceed 50% of borrower income (State Mortgage, 2014). Among banks the lowest 20 year mortgage rate is 18.7% with loan-to-value ratio minimum 65%. For 80% loan-to-value ratio the mortgage rate is higher, 20.9% (Prostobank, 2014). For bank loans taken jointly with the SMI the rate is 16.5%, but even without the SMI there are some new-build blocks of houses offered with a 12-13% mortgage special offer. The weighted average mortgage rate in 2013 was 18.5% for loans in UAH and 13% for loans in hard currency. In March 2014, just before the depreciation, the rates decreased to 17.5% and 7.8% respectively. Overall, compared to other countries the scale of mortgage credit in Ukraine is quite small, 4% of GDP; a mortgage is incredibly expensive and should be made more available in terms of the rate. However, when mortgage finance does become available, land market regulations are so restrictive and housing construction is so slow in reacting that the finance simply feeds sharp house price increases rather than resulting in more housing (Shiller, 2005); this already happened in the mid 2000-s in Russia. Therefore, a mortgage rate decrease should be well balanced with sufficient construction of housing.

De-dollarization is a big challenge for the banking sector. It is worth noting that for a long time 80-85% of housing loans in Ukraine were in dollars or euros and only in 2013 did the share of foreign currency debt decrease to 70% of all debt on this kind of credit. A relatively large share of foreign exchange – denominated loans together with a lack of competition in many sectors, and the shortage of affordable and long-term finance has caused severe problems for the finance sector. Depreciation is putting an immediate strain on the banks' capital adequacy ratios through losses generated from the deteriorating quality of the loan portfolio. As these trends continue, there is a very high risk that a large number of banks will be identified as insolvent, shifting the burden to the Deposit Guarantee Fund [DGF], which may be required to make very large depositor payouts and resolve multiple banks quickly (Ukraine Snapshot, 2014). The system of housing finance not only needs to be supported now but also should be developed in future by decreasing rates on mortgages and by implementing other instruments of housing affordability in addition to the existing mortgage financing scheme.

For two years housing finance in Ukraine has experienced a time of turbulence. In 2013 alone, some new articles of the Budget Code and of the Tax Code, 56 laws and more than 40 government acts came into force that totally changed the real estate market (RBK, 2014). At the end 2012 the SMI refinancing rate jumped. Since January 2013 certificates of title, contracts of sale, mortgages, other encumbrances and other documents relating to the rights to housing and other real property, must be registered with the State Registration Service in the relevant registers of rights.

On September 2013 the National Bank set the maximum amount of cash payments at the level of 150,000 UAH per day for individuals. All cash transactions carried out in the housing market (usually in dollars) without actually fixing the amount paid (except the mortgage) have become illegal. According to the new rule when selling and buying an apartment, you need to open a bank account, transfer funds to pay for the procedure and lose some money by exchanging dollars into hryvnia and back.

In August 2013, Ukraine implemented a new procedure for the assessment of property for tax purposes and the calculation of other mandatory payments. It led to long queues for the procedure in spite of additional costs of assessment.

In January 2014, new rules of real estate taxation came into force. Previously, only one dwelling was considered for tax purposes, usually the largest; the apartment area should not exceed 120 sq. m and the area of a house was limited to 240 sq. m. Now the total living area of all dwellings belonging to the taxpayer, including different types (apartments, houses or apartments and houses) is taken into account. For owners of more than one dwelling the tax rate is 1% of the total area up to 740 sq. m and 2.7% above this threshold. At the same time the list of vulnerable groups subject to tax exemption has been expanded.

Since March 2014 there has been imposed a limit of 15,000 UAH[5] on cash withdrawals or purchase of foreign currency per person per day. Together with restrictions on cash payments and hard currency deposit withdrawals they are binding for sellers and buyers of housing.

In short, the housing market has been really unstable due to overall economic and political turbulence. Nevertheless, the regional disparities in housing affordability can be measured as a ratio of the average wage to the price of 40 sq. m of accommodation (studio) in December 2013 and in April 2014, as well as a ratio of the average wage minus the subsistence level of a working-age adult to the price of the same 40 sq. m of accommodation (studio) in December 2013 (Table, Annex 3). The rationale behind this is that the average working Ukrainian would have to save all her money for 6.6 years to buy a standard flat. If she saves a half of her earnings, or there are two working adults consuming one salary and saving another, the period will be twice as long, 13.2 years. Supposing that the cost of living for an adult person equals the minimum subsistence level and all the rest of the wage is saved for housing, then the period of saving will be 10.4 years. In April 2014 the period of saving all earnings for housing had become 1.7 longer compared to December 2013.

4. Regional disparities in housing affordability

Considerable regional diversity within Ukraine is striking for housing and for the overall economic position of this large country (Lehmann et al, 2012). However, all findings on housing have limitations due to data constraints, because there are no official statistics on the housing market in Ukraine. While we can estimate regional prices by looking at open-access adverts at Domik.ua, as the Independent Association of the Banks of Ukraine does (Domik, 2014; Independent, 2014),

5 It is 1,277 USD in July 2014.

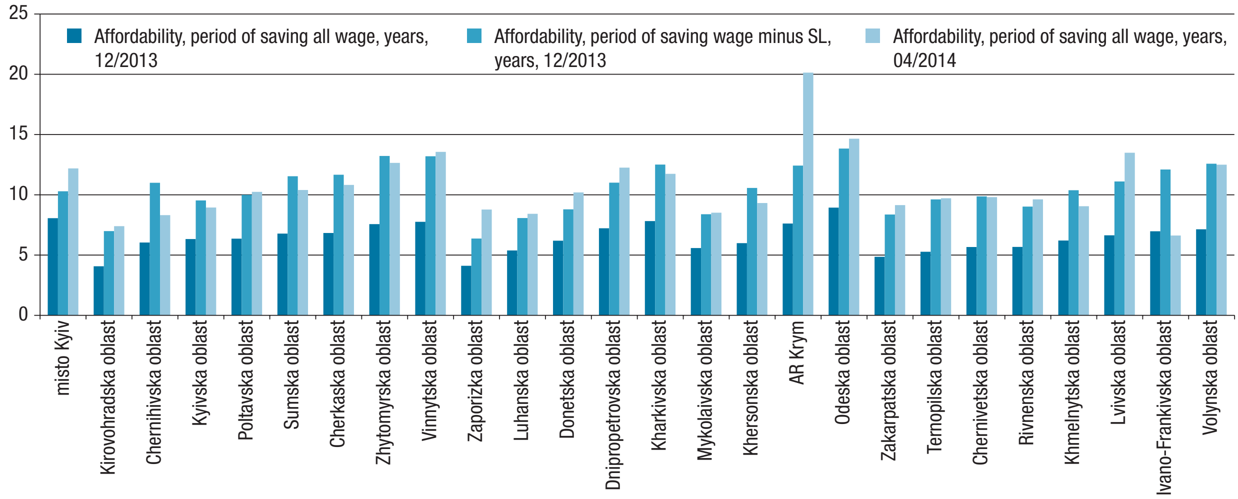
6 The administrative unit in Ukraine is called 'oblast'. Usually the name of region is derived from the name of the central city except for Crimean Autonomous Republic, Zakarpattia and Volyn.

we should keep in mind that (a) they are seller-prices and do not necessarily coincide with the final price of a deal, and (b) the number of deals in a specific region sometimes is small, therefore jumps in prices are smoothed by the moving average technique. The volume of the housing market by regions continues to be a puzzle for researchers. The database of the World Bank 2010 (Kupets, 2012) has the same limitations, consisting of housing and rent prices only in main regional cities therefore representing regional housing with a high degree of conditionality. Taking into account the low level of urbanization in some regions together with concentration of economic activity and housing construction in regional centers we can conclude that so-called 'regional' prices in the Domik database are predominantly the regional center ones.

There are 27 administrative units in Ukraine and the division is consistent with the Nomenclature of Territorial Units for Statistics standard (NUTS-2) in the old and new EU member states. An officially adopted subdivision of Ukraine into macro regions does not exist. A useful grouping of regions is based on human and economic development regional statistics (Kupets, 2009). However, the 'geographical' one we keep to is the most widely used and simple. We describe affordability of housing and mortgage concentration by region in the context of their socio-economic characteristics (Table, Annex 3; Map, Annex 1). A detailed report on the main specialization of regions and geographic concentration of manufacturing industries can be found (Fankhauser et al., 2008; Kupets et al., 2012). We also refer to O. Kupets research on housing and rental prices as factors in relation to internal labour mobility (Kupets, 2012) with the main finding that in 2010 differences in housing prices were much more pronounced than persistent regional disparities in income and wages. Huge inequality in the affordability of housing still exists in 2013.

- Kyiv City is characterized by exceptionally high levels of economic and human development, high living standards and favorable employment opportunities, concentration of human capital, investment, production, overall prosperity and attractiveness to internal migrants from the rest of the country despite very high housing prices; $439 per month for a one bedroom apartment rent[7] in 2010. The housing in the second-hand market is among the least affordable compared to other regions – 8 years of saving all earnings. 36% of all mortgage debt is concentrated in Kyiv and Kyiv oblast.
- The Centre and North (consisting of Vinnytsia, Zhytomyr, Kyiv, Kirovohrad, Poltava, Sumy, Cherkasy and Chernihiv oblasts) with a predominantly Ukrainian-speaking population and with agriculture as a high proportion of total employment. Despite proximity to the capital city and great potential for economic development, this macro region lags behind in many aspects of the labour market and human development. Except for Vinnytsya (49.5%) and Sumy (67.3%) the urban population is 56-63% of the total. The average housing price is $106 per month rent for a one bedroom apartment (2010). This is the most homogeneous macro region in terms of affordability, 6-7/8 years of saving, with a low concentration of mortgage finance.
- The industrially developed and urbanized East with a predominantly Russian-speaking population (which consists of Dnipropetrovsk (83.5% urban population), Donetsk (90.5%), Zaporizhia (76.9%), Luhansk (86.7%) and Kharkiv (80%) oblasts) is the second richest macro region of Ukraine after Kyiv City with a rather good labour market performance. Despite relatively high wages and low unemployment rates it lags behind the other macro regions in terms of demographic development, social situation and environment quality. The average housing price here in 2010 was $158 per month rent for a one bedroom apartment. While in Zaporizska and Luhanska oblasts housing is quite affordable, in Dnipropetrovsk and Kharkiv it would take 7 years to save for a standard flat. The mortgage finance is concentrated in Kharkiv.

Figure 4 Affordability of housing as the period of saving total earnings needed to purchase 40 sq.m accommodation in December 2013 and April 2014



Source: Author's calculations based on State Statistics Service (Derzhstat) and Domik.ua data

7 Rental prices are cited from (Kupets, 2012)

- The South (which includes Crimean AR and Sevastopol, Mykolayiv, Odesa and Kherson oblasts) with a predominantly Russian-speaking population and a rather diversified economy. The overall human and labour market development in this macro region is more advanced than in the rest of the country (leaving aside Kyiv city) but it is highly volatile because of the significant dependence on the seasons, weather conditions, and the political situation (particularly in Crimean AR and Sevastopol). The urban population is 61-68% of the total. The average housing price is $169 per month rent for a one bedroom apartment (2010). Odessa not only has the most unaffordable housing compared to other regions, but also 14% of Ukraine mortgage finance is concentrated here. Odessa, Kyiv city and Kyiv oblast are the biggest centers of mortgage finance.
- The agrarian and predominantly rural West with a Ukrainian-speaking population (which includes the most rural Zakarpattia (37.2% urban population), Ivano-Frankivsk, Ternopil, and Chernivtsi (all 42-44%), Rivne (47.8%), Volyn (51.7%) Khmelnitskyi (54.6%) and Lviv (60.7%) oblasts) exhibits the worst performance measured by economic, labour market and human capital indicators but it performs fairly well in terms of the demographic, social, and environmental situation. Weak labour market development, poor living conditions and material well-being of the local population encourage considerable out-migration of population, both within the boundaries of Ukraine and outside them. The considerable inflow of money from labour migrants from abroad to their families keeps the average housing price quite high at $127 per month rent for a one bedroom apartment (2010). Lvivska and Zakarpatska oblasts have 2-3% of Ukrainian mortgage finance, while others are not so much involved. In Lvivska, Ivano-Frankivska and Volynska oblasts the affordability of housing is quite moderate, 6.6-7 years; in other western regions the period of saving is shorter.

In many respects, the basic conclusion on housing finance in Ukraine is striking but positive: there is a long way to go, but a journey of a thousand miles begins with a single step.

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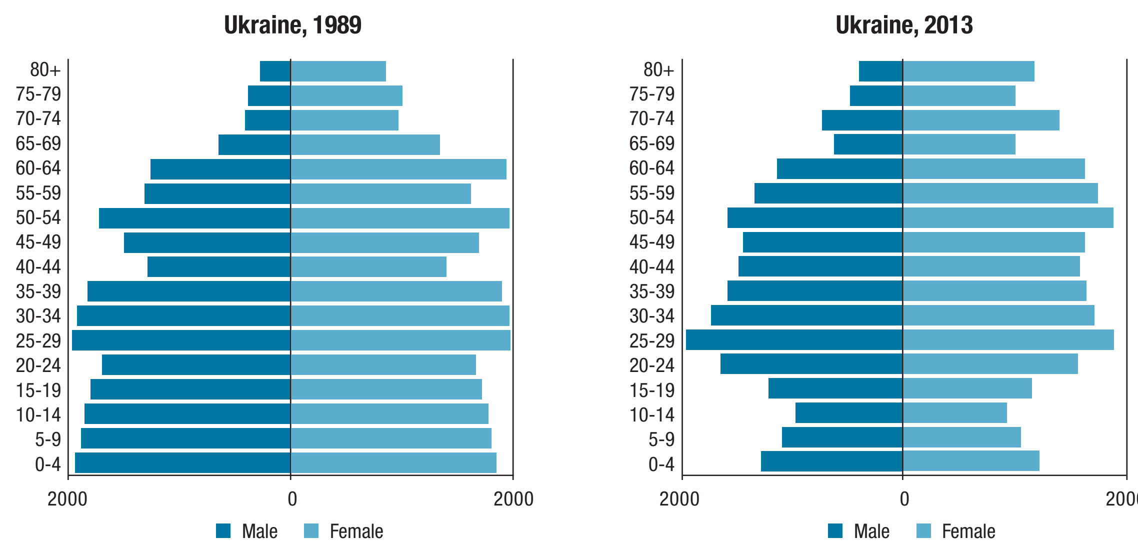
The World Bank in Ukraine http://www.worldbank.org/en/country/ukraine

Annex 1 **The map of Ukraine**

Source: United Nations, March 2014. http://www.un.org/depts/Cartographic/map/profile/ukraine.pdf

Annex 2 **Demographic pyramid,** Gender and age structure of Ukraine population in 1989-2013, th. of persons



Source: Author's calculations based on State Statistics Service (Derzhstat) data

Annex 3 Table Mortgage debt, wage cost and affordability of housing and population by regions

	Macro region	Mortgage debt, % of total	Wage, UAH per month per person	Cost of 1 sq. m of housing, USD	Affordability, period of saving all wage, years	Affordability, period of saving wage minus SL, years	Wage, UAH per month per person	Cost of 1 sq. m of housing, USD	Affordability, period of saving all wage, years	Population, million	Population, % of total	Share of urban population in the region, %
		04/2014	12/2013	12/2013	12/2013	12/2013	04/2014	10/05/2014	04/2014	2013	2013	2013
Ukraina		100.0	3619		6.6	10.4			11.2	45.5	100.0	68.9
Avtonomna Respublika Krym	South	3.1	3148	900	7.6	12.4	3013	1570	20.1	2.0	4.3	62.7
Vinnytska oblast	North	1.6	2956	861	7.8	13.2	2650	930	13.6	1.6	3.6	50.3
Volynska oblast	West	1.2	2817	755	7.1	12.6	2526	817	12.5	1.0	2.3	52.1
Dnipropetrovska oblast	East	9.9	3544	961	7.2	11.0	3390	1075	12.3	3.3	7.3	83.6
Donetska oblast	East	4.7	4117	957	6.2	8.8	4036	1065	10.2	4.4	9.6	90.6
Zhytomyrska oblast	North	1.4	2848	809	7.6	13.2	2597	850	12.6	1.3	2.8	58.5
Zakarpatska oblast	West	1.8	2906	530	4.9	8.4	2607	617	9.1	1.3	2.8	37.2
Zaporizka oblast	East	2.6	3434	530	4.1	6.4	3416	776	8.8	1.8	3.9	77.1
Ivano-Frankivska oblast	West	1.2	2876	753	7.0	12.1	2766	474	6.6	1.4	3.0	43.4
Kyivska oblast	North	0.0	3624	861	6.3	9.5	3456	800	8.9	1.7	3.8	61.9
Kirovohradska oblast	North	0.6	2918	446	4.1	7.0	2643	506	7.4	1.0	2.2	62.5
Luhanska oblast	East	1.8	3657	739	5.4	8.1	3404	742	8.4	2.2	4.9	86.8
Lvivska oblast	West	2.8	3029	755	6.6	11.1	2816	983	13.5	2.5	5.6	60.9
Mykolaivska oblast	South	1.9	3641	763	5.6	8.4	3299	727	8.5	1.2	2.6	67.9
Odeska oblast	South	13.8	3440	1154	8.9	13.8	2972	1127	14.7	2.4	5.3	66.9
Poltavska oblast	North	1.4	3350	800	6.4	10.0	3082	817	10.2	1.5	3.2	61.5
Rivnenska oblast	West	1.1	3285	700	5.7	9.0	3048	759	9.6	1.2	2.5	47.8
Sumska oblast	North	0.9	2954	752	6.8	11.5	2698	726	10.4	1.1	2.5	68.0
Ternopilska oblast	West	0.8	2697	534	5.3	9.6	2371	596	9.7	1.1	2.4	44.2
Kharkivska oblast	East	5.4	3250	954	7.8	12.5	3071	933	11.7	2.7	6.0	80.4
Khersonska oblast	South	1.5	2811	632	6.0	10.6	2505	604	9.3	1.1	2.4	61.2
Khmelnytska oblast	West	1.4	3030	706	6.2	10.4	2847	667	9.1	1.3	2.9	55.7
Cherkaska oblast	North	0.9	2940	754	6.8	11.7	2682	751	10.8	1.3	2.8	56.5
Chernivetska oblast	West	0.7	2862	609	5.7	9.9	2435	618	9.8	0.9	2.0	42.6
Chernihivska oblast	North	0.7	2703	613	6.0	11.0	2654	571	8.3	1.1	2.4	63.7
misto Kyiv		36.7	5618	1700	8.1	10.3	5313	1676	12.2	2.9	6.3	100.0
misto Sevastopol	South		3911				3089	1206	15.1	0.4	0.8	93.8

Source: Author's calculations based on State Statistics Service (Derzhstat) and Domik.ua data