**Introduction**

The objective of this paper is three-fold: 1) investigate current conditions of housing and housing finance markets in transition economies; 2) assess their market potential compared to one another and to the advanced EU countries (EU15 countries); and 3) provide some thoughts for policy makers and for entrepreneurs based on lessons from this research. To this end, study countries are selected from countries targeted in the OECD Market Survey, which are classified into three geographical groups for convenience' sake: 1) Central-Eastern European countries and Baltic States (new EU member states, *Group 1*): the Czech Republic, Estonia, Hungary, Latvia, Lithuania, Poland, the Slovak Republic and Slovenia; 2) South-Eastern European countries (EU candidate countries, *Group 2*): Croatia and Romania; and 3) Commonwealth Independent States (CIS, *Group 3*): Kazakhstan and Ukraine.

This paper consists of five sections. The first section analyses current housing markets in the study countries to assess the supply and demand potential of housing markets. The second section investigates current conditions of housing finance markets in the region to examine the performance of both primary (lending) and secondary (funding) markets. The third section analyses the regulatory and supervisory framework in both primary and secondary markets and the national housing policy (e.g. government subsidy) to identify the legal infrastructure and the role of government. The fourth section assesses the overall performance of housing finance in transition economies based on aggregate results gleaned from foregoing chapters and provides lessons from this study. Then the final section touches upon the mortgage default insurance markets in the region and discusses the potential for the mortgage insurance business in transition economies.

**Methodology**

Because of the lack of comprehensive statistics on housing finance, much of the necessary data was collected from a market survey and questionnaire specially elaborated to assess the performance of housing finance markets and systems in study countries. The survey data were supplemented by the most recently available published statistics. The study field consists of three major groups and six sub-categories: 1) housing markets: a) housing demand and b) housing supply; 2) housing finance markets: a) primary market and b) secondary market; and 3) role of the government: a) regulatory structure and b) housing policy. The transition economies are compared with the advanced EU countries (EU15) as a benchmark against which to assess the performance in each study country, which are scored and translated into a performance matrix in respective groups. Then, the dynamics of housing finance markets are explored via the use of spider charts, which consolidate the results of performance matrices, with the SWOT (strength, weakness, opportunity and threat) analysis. The detailed methodology is explained in respective chapters.

**1. Housing Markets**

From the collected data, six major trends concerning housing markets can be identified in transition economies: 1) new demand potential given the limited growth of the population; 2) small but growing economies; 3) low housing affordability; 4) high level of homeownership but housing shortage; 5) low quality of housing; and 6) small-scale housing supply not targeting typical households. The next sections present the evaluation of housing markets in the region.

*1-1. Demand of Housing*

*Negative population growth will hold back new demand for housing, but a relatively large amount of working age people within the population may constitute potential new demand.*

Households are obviously an essential element to vitalise the housing market. Population growth, particularly the increase in the working age population, usually creates additional demand for housing. Central-Eastern European countries and Baltic States, as new EU members, account for over 16% of the total EU population at present. As seen in Figure 1, although aggregate population growth in the EU area is around 0.2%, that in study countries has shown almost zero or negative growth. This means that the potential new demand for housing from population growth alone simply is not to be expected. According to national standards in respective countries, however, roughly 48% of the population are regarded as potential labour force (working age population) in most of the countries, which is on par with the EU15 level (47%). Potential demand for housing can be created from this segment of the population.

**Figure 1: Population and Labour Force**
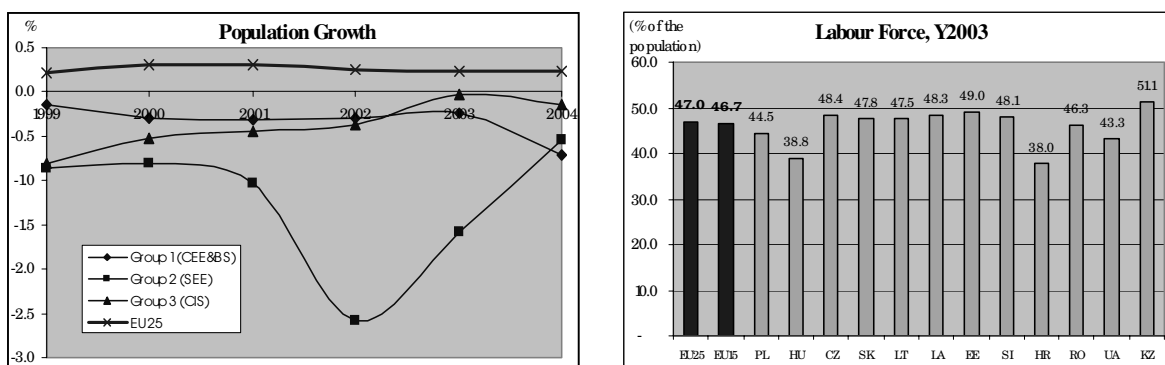


*(Source) The Economist Intelligence Unit*

***GDP is small in scale in the region, but economic conditions have been gradually improved.***

Gross domestic product (GDP) in study countries is still small in scale as compared to the advanced EU countries. No countries in the region exceed the EU average of GDP per head (with most less than half the EU average except for Slovenia). However, their real GDP growth (estimated at 4-12% growth in 2004) has been above both the estimated EU average (2.3% in 2004) and the OECD average growth (3.4% in 2004). All study countries faced severely negative economic shocks immediately after achieving their independence but their economic performance gradually recovered by late 1990s. Since then, their domestic economies have been growing at different speeds. Particularly, as countries in Group 1 and 2 were required to clear several economic criteria for accession to the EU, their economic conditions would be expected to improve further. The positive economic growth in the region will be a driving force for stimulating household consumption including of housing.

**Figure 2: Gross Domestic Product**
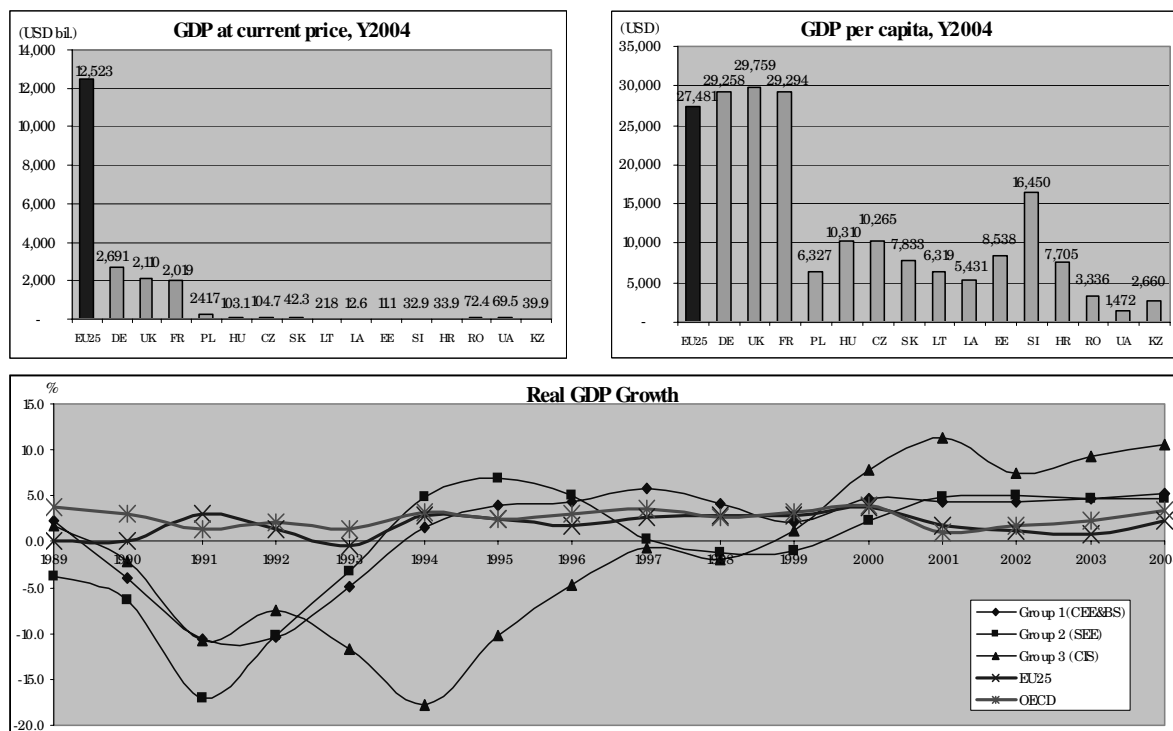


*(Source) EBRD Transition Report 2003, OECD Economic Outlook VOL. 2004/1 No.75, The Economist Intelligence Unit*

***Inflation rates have moderately diminished and wage levels have been improved, but high prices of housing and still low incomes have been limiting housing affordability in the region.***

High inflation makes households hesitant to invest in goods and services, even more so for home-purchase given its expensiveness. Consumer price inflation has moderately diminished from double digit rates to single digits (estimated at roughly 1-9% in 2004) in study countries except for Romania (estimated at 12%). However, inflation rates in the region have still remained above the EU level of 2% except for Lithuania (1%) and Croatia (2%). Furthermore, house price inflation is much higher than for any other goods (e.g. foods and alcohols) and services (e.g. transport and recreation) in study countries (in particular, in the Slovak Republic and Kazakhstan, which recorded rates over 22% in 2003), and rates are also beyond the EU15 average (2.6% in 2003) in most of the countries.

In addition, people in the region have unfortunately experienced a rather low income level, which also tends to impede active household consumption. Although the rate of increase in monthly average wages in study countries has been above EU15 average growth, they are still less than half of the EU15 level (mostly less than a quarter). Also, most of study countries, except for Group 3, still face high unemployment rates, particularly in Poland, Slovak Republic, Slovenia, and Croatia (11-20%) as compared to the EU average (estimated at 9.4% in 2004).

Even so, housing related expenditures (new purchase, maintenance, etc.) in the region account for roughly 20% of the total household consumption, which is equivalent to the EU15 level (21%).

Taking account of those conditions, there will still be many more households in transition economies who do not have access to the housing market compared to those in the advanced EU countries, despite the fact that there exists an untapped potential demand for housing.
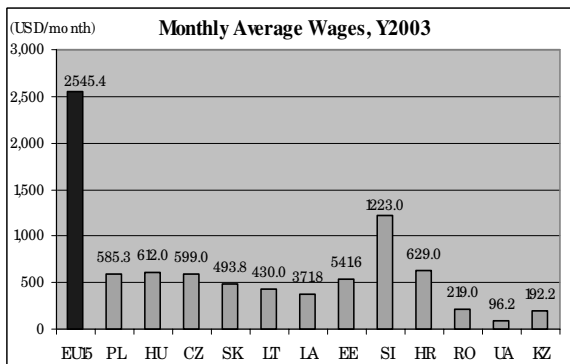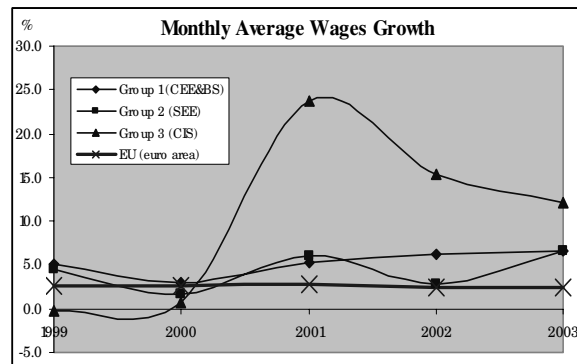
**Figure 3: Inflation, Unemployment and Earnings**
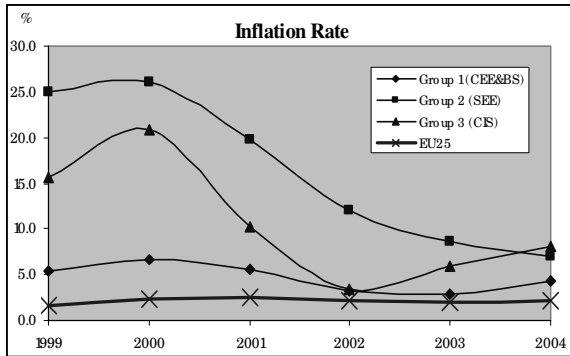


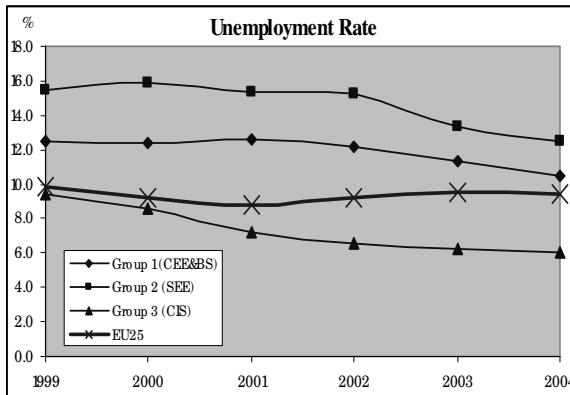*(Source) The Economist Intelligence Unit*
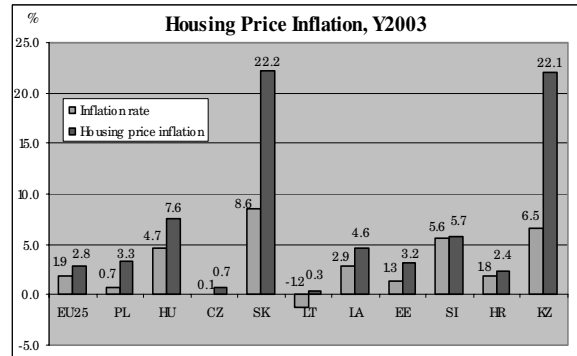


*(Source) Eurostat, Country Notes on OECD Housing Finance Workshop 2004*
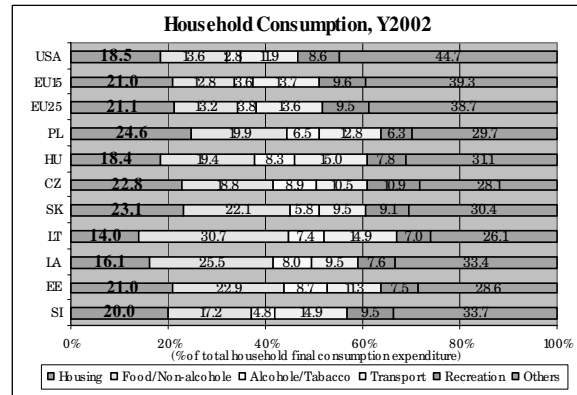


*(Source) The Economist Intelligence Unit*



*(Source) The Economist Intelligence Unit*



*(Source) The Economist Intelligence Unit, EBRD Transition Report 2003*



*(Source) Eurostat ; CZ, LI & LA : data in 2000*

***The high level of homeownership has been achieved while most of countries are under the housing shortage.***

In the former socialist regimes, the government used to provide housing to the public according to the centrally planned economy. Since gaining independence (early 1990s), most of the study countries have actively encouraged homeownership by means of mass housing privatisation and the introduction of several subsidy programs for housing, which were expected to spur the transition to a market economy. As a result, most study countries have achieved high levels of homeownership (average of 80% of total occupied dwellings) in comparison with EU15 (approx. 64%) and the United States (approx. 67%), although the Czech Republic and the Slovak Republic are still below the average with homeownership rates of about 50%. In contrast with this situation, as seen in the number of dwellings

per 1000 inhabitants, housing stocks in study countries suggest there is a housing shortage (study countries average: 389 dwellings) except for Ukraine and Kazakhstan as compared to the EU15 (453 dwellings).
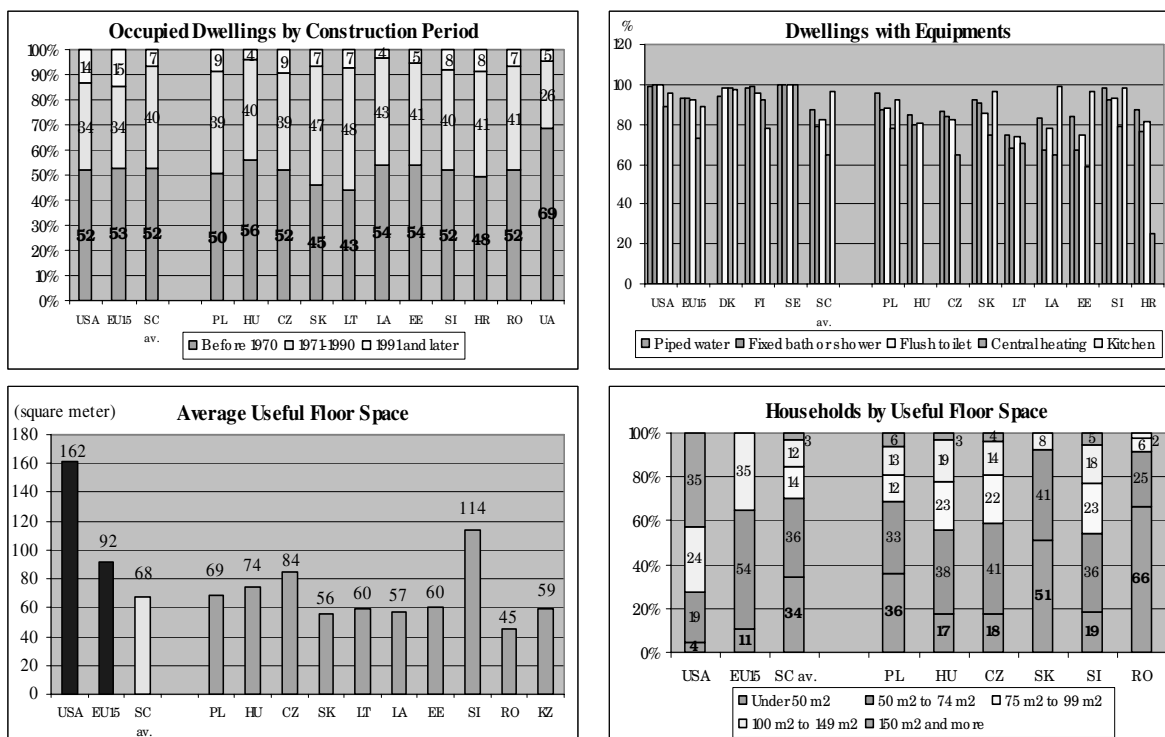
**Figure 4: Housing Stocks**
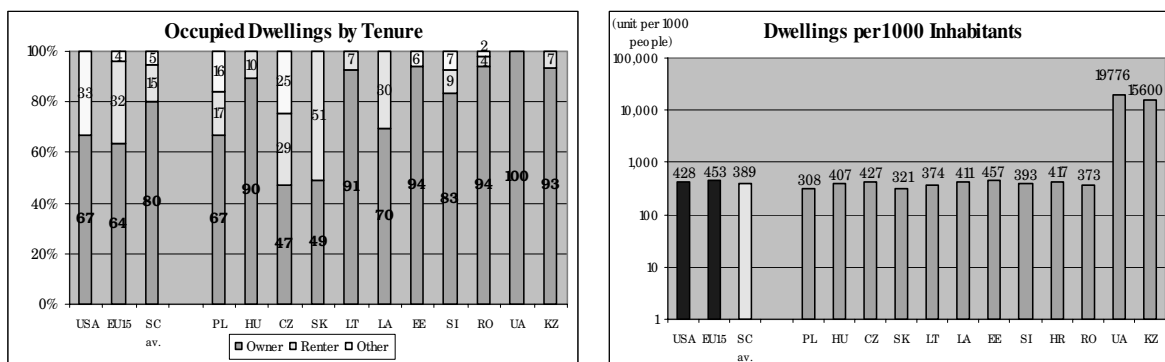


*(Source) United Nations Economic Commission for Europe, National Agency for Enterprise and Housing of Denmark     * SC av.: study countries average*

### *Housing quality is in the crucially low level in the region.*

The following three conditions are key factors to assess housing quality: 1) construction period; 2) equipment installed in a house; and 3) useful floor space.  First, as for the construction period, approximately 52% of total occupied dwellings have been in existence for more than 30 years.  This duration is not exceptional among European countries but, more importantly, over 90% of dwellings in study countries are houses built in the former communist era.  Those houses are often described as poor quality housing because they were originally provided by governments operating on limited budgets and were given little maintenance.  Building houses comfortable to live in was not in the states' interest at that time.  Secondly, as seen in terms of the equipment installed in a house, study countries lack core equipment (e.g. piped water, fixed bath or shower, flush toilet, central heating and kitchen) in their houses as compared to the EU15 and the United States.  Particularly, central heating is not well diffused in the area, which experiences a very cold winter (Central Europe and Baltic States: less than 70% of the dwellings) as compared to the advanced EU countries located in cold area (Sweden, Denmark and Finland: over 90%).  Thirdly, the average useful floor space of dwellings is small in the region (roughly 68 m$^2$) in comparison with the EU15 (approx. 92 m$^2$).  Moreover, around 34% of total households in study countries live in houses below 50 m$^2$ (for example, Slovak Republic 51% and Romania 66%).  Taking those conditions into account, housing quality in study countries is still low as compared to the EU average level.

**Figure 5: Housing Quality**



*(Source) United Nations Economic Commission for Europe, National Agency for Enterprise and Housing of Denmark   * SC av.: study countries average*

## *1-2. Supply of Housing*

***Small scale housing supply does not help to cover the relative housing shortage. New construction of dwellings tends to focus on the higher income market segment, which has yet to contribute to the average household's access to housing.***

On the supply side of housing, the number of newly completed dwellings (including new construction, restoration, extension and conversion) is quite small in scale in study countries (roughly 2 dwellings per 1000 inhabitants) as compared to EU15 (approx. 6 dwellings).  Although the volume of new construction has been slightly moving upward recently, it does not help to cover the relative housing shortage in the region.

In this limited situation, the private sector has taken an active role in construction; i.e. approximately 90% of total dwellings have been completed by private developers in study countries.  This seems to be a good development but includes some critical issues: 1) little effective use of vacant dwellings and 2) private developers' narrow interest in constructing luxury dwellings and/or commercial buildings.

First, the ratio of the vacant dwellings (approx. 8% of the total dwellings in the region) is below the EU15 level (approx. 10%) but some countries (Croatia, Czech Republic, Estonia and Slovenia) have shown high vacancy ratios (12-23%), which means that existing housing stocks have not been used effectively.  To make the best of vacant dwellings, it might be necessary to improve their quality for the resale market.

Second, residential construction accounts for only a small portion of total construction value in the region (approx. 21% of the total).  In other words, commercial construction accounts for roughly 80%

of the total construction value in transition economies.  Furthermore, while the average useful floor space of dwellings is approximately 68 m$^2$ in the region, that of newly completed dwellings is around 117 m$^2$, which means that private developers tend to deal mainly with the construction of up-scale dwellings and/or commercial building construction with large space.  This tendency has not helped improve the average households' access to housing in study countries.
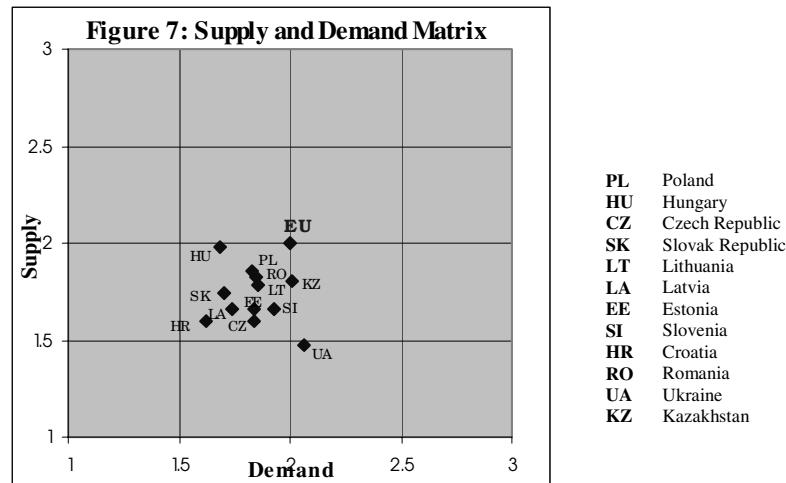
**Figure 6: New Construction**
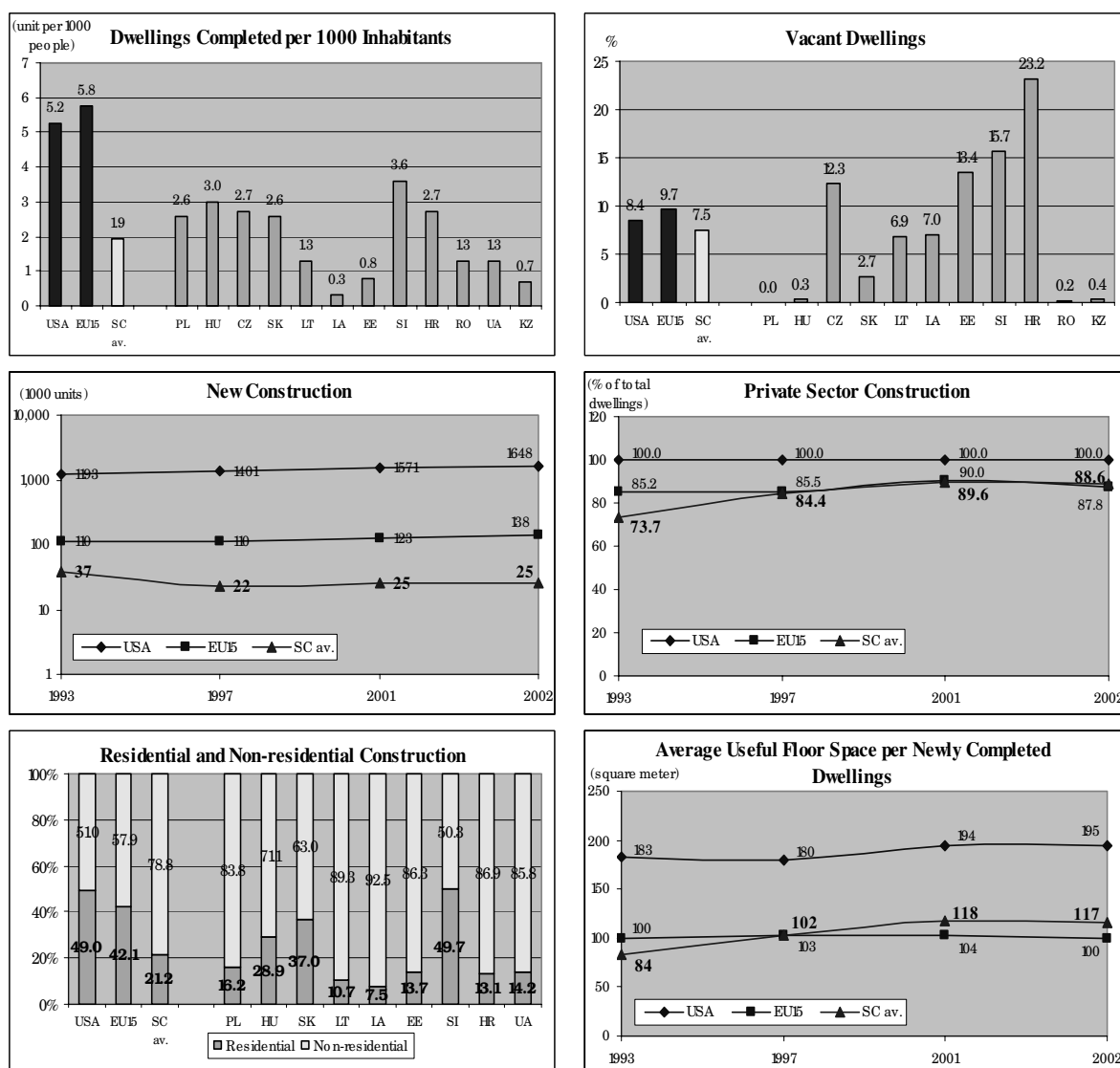


*(Source) United Nations Economic Commission for Europe, National Agency for Enterprise and Housing of Denmark*    * SC av.: study countries average

### *1-3. Country Assessments*

Taking account of the above mentioned analyses, the current performance of housing markets in transition economies was assessed in terms of the supply and demand conditions in accordance with the following three steps: 1) calculating the deviation of the performance from the EU15 average based on a normal distribution; 2) scoring the housing market performance; and 3) assessing the total performance of housing markets in study countries by means of the country assessment sheet developed from each score.  Figure 7 indicates the aggregate result from Table 1.

**Figure 7: Supply and Demand Matrix**

| | | |
|---|---|---|
| **PL** | Poland | |
| **HU** | Hungary | |
| **CZ** | Czech Republic | |
| **SK** | Slovak Republic | |
| **LT** | Lithuania | |
| **LA** | Latvia | |
| **EE** | Estonia | |
| **SI** | Slovenia | |
| **HR** | Croatia | |
| **RO** | Romania | |
| **UA** | Ukraine | |
| **KZ** | Kazakhstan | |

From Figure 7, the current performance of housing markets and the housing supply and demand potential in study countries can be analysed as follows:

- In Group 1 and 2 (new EU members and candidates), housing demand is quite limited and housing supply for households is quite insufficient. At present, no countries reached the EU15 level in terms of the housing supply and demand, but their demand potential are gradually approaching the EU level.

- In Group 3 (CIS), potential housing demand is slightly above the EU15 level in terms of large-scale housing stocks and high homeownership level backed by privatisation programs. Against this background, housing supply (new construction) is not so active in the region.

- As seen in the relatively high homeownership and household consumption for housing, the potential demand of housing is obviously as high as in the advanced EU countries. However, at present, several external factors, e.g. declining population, low macroeconomic performance, severe labour conditions, high price of housing and low quality of housing, are not supportive to efforts to create further housing demand in study countries.

- In the long term, gradually improving macroeconomic conditions (positive real GDP growth and increasing wage levels) may support the housing market by stimulating consumption by relatively large-scale working age population.

- On the supply side, new housing constructions, renovations and enlargements are not so active and there is little sign of sharp upward movement. As private developers tend to target commercial construction and/or wealthier households through the provision of luxury (spacious) housing, residential construction for typical households is inactive in spite of the apparent housing shortage in the region (except for Group 3). This results in low access to new dwellings for average households.

**Table 1: Supply and Demand of Housing – Country Assessment Sheet**

| | | PL | HU | CZ | SK | LT | LA | EE | SI | HR | RO | UA | KZ |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Demand** | **Population and Labour Force** | | | | | | | | | | | | |
| | - Population growth | 2- | 1 | 2- | 2- | 1+ | 1+ | 1 | 2- | 1 | 2- | 1+ | 2 |
| | - Labour force (working age population) | 2- | 1+ | 2+ | 2+ | 2+ | 2+ | 2+ | 2+ | 1 | 2 | 2- | 3- |
| | **Macroeconomic Performance** | | | | | | | | | | | | |
| | - GDP at current price | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- |
| | - Real GDP growth | 3 | 3- | 3- | 3- | 3 | 3 | 3 | 3- | 2+ | 3 | 3 | 3 |
| | - Inflation rate | 1+ | 1 | 2- | 1 | 2+ | 1 | 1+ | 1+ | 2- | 1 | 1 | 1 |
| | **Labour Condition** | | | | | | | | | | | | |
| | - Monthly average wages (income level) | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1+ | 1 | 1 | 1 | 1 |
| | - Monthly average wages (growth rate) | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 2+ | 3 | 3 | 3 | 3 |
| | - Unemployment rate | 1 | 2+ | 2- | 1 | 2 | 2- | 2- | 1+ | 1 | 2+ | 3- | 2- |
| | **Price and Consumption** | | | | | | | | | | | | |
| | - Housing price inflation as compared to all goods & services | 2 | 2- | 2+ | 1 | 2+ | 2- | 2 | 2- | 2 | n/a, | n/a, | 1 |
| | - Household consumption for housing | 2+ | 2- | 2+ | 2+ | 1+ | 1+ | 2 | 2- | n/a, | n/a, | n/a, | n/a, |
| | **Housing Stocks** | | | | | | | | | | | | |
| | - Dwellings per 1000 inhabitants | 1 | 2- | 2- | 1 | 1+ | 2- | 2 | 1+ | 2- | 1+ | 3 | 3 |
| | - Home ownership ratio | 2+ | 3 | 1+ | 1+ | 3 | 2+ | 3 | 3- | n/a, | 3 | 3 | 3 |
| | **Housing Quality** | | | | | | | | | | | | |
| | - Occupied dwellings constructed before 1971 (over 30-year) | 2+ | 2- | 2 | 2+ | 2+ | 2 | 2 | 2 | 2+ | 2 | 1+ | n/a, |
| | - Dwellings with equipments - Piped water | 2+ | 2- | 2- | 2 | 1+ | 2- | 2- | 2+ | 2- | n/a, | n/a, | n/a, |
| | - Fixed bath or shower | 2- | 1+ | 2- | 2- | 1 | 1 | 1 | 2 | 1+ | n/a, | n/a, | n/a, |
| | - Flush toilet | 2- | 1+ | 2- | 2- | 1+ | 1+ | 1+ | 2 | 1+ | n/a, | n/a, | n/a, |
| | - Central heating | 2+ | n/a, | 2- | 2 | 2 | 2- | 2- | 2+ | 1+ | n/a, | n/a, | n/a, |
| | - Kitchen | 2+ | n/a, | n/a, | 2+ | n/a, | 2+ | 2+ | 2+ | n/a, | n/a, | n/a, | n/a, |
| | - Average useful floor space | 1 | 1+ | 2- | 1 | 1 | 1 | 1 | 3- | n/a, | 1 | n/a, | 1 |
| | - Households living in dwellings under 50m² | 1 | 1 | 1 | 1 | n/a, | n/a, | n/a, | 1 | n/a, | 1 | n/a, | n/a, |
| **Average Performance (sum of scores divided by the number of items)** | | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2 | 2 |
| **Supply** | Newly completed dwellings per 1000 inhabitants | 2- | 2- | 2- | 2- | 1+ | 1+ | 1+ | 2- | 2- | 1+ | 1+ | 1+ |
| | Occupancy level (from the ratio of vacant dwellings to the total) | 2+ | 2+ | 2- | 2+ | 2+ | 2+ | 2- | 2- | 1+ | 2+ | n/a, | 2+ |
| | New construction by private sector | 2+ | 2+ | 1+ | 2- | 2+ | 3- | 2+ | 1+ | 1+ | 2 | 1+ | 2+ |
| | Ratio of newly completed residential construction to the total construction value | 1 | 1+ | n/a, | 2- | 1 | 1 | 1 | 2+ | 1 | n/a, | 1 | n/a, |
| | Average useful floor space per dwelling completed (size) | 2 | 2+ | 2- | 1+ | 2 | 1 | 2 | 1+ | 3- | 2- | 2+ | 1+ |
| **Average Performance (sum of scores divided by the number of items)** | | 2- | 2 | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 2- | 1+ | 2- |

*(Notes) Methodology*

1. Performance Deviation from the EU15 level: The normal distribution made out from the data on EU15 countries is used in order to assess how the performance in each study country has approached the EU level as a measure. All items measured are based on the statistics on Annex 1; where the assumption is as follows: 1) Mean: the value of the EU15 average; 2) Standard deviation (STDEV): the range of EU15 countries; and 3) Normal distribution (NORMDIST): in the excel calculation formula, NORMDIST (x, mean, STDEV, cumulative), where "x" is the value of performance in the study country and "cumulative" is set on "TRUE" (i.e. cumulative distribution).

2. Scoring: Based on the following scoring table, each condition influential in the housing market was rated from 1 (relatively low performance) to 3 (relatively high performance) as compared to the EU15 level; where the rating is classified into seven categories in terms of the normal distribution: 1: much worse than EU15; 1+: worse than EU15; 2-: slightly worse; 2: EU15 level; 2+: slightly better than EU15; 3-: better than EU15; and 3: much better than EU15.

Scoring Table

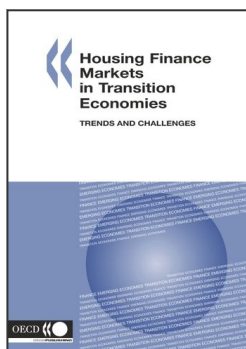| NORMDIST | - 0.02 | 0.03 - 0.16 | 0.17 - 0.44 | 0.45-0.54 | 0.55 - 0.84 | 0.85 - 0.98 | 0.99 - |
|---|---|---|---|---|---|---|---|
| Score (A) | 1 | 1+ | 2- | 2 | 2+ | 3- | 3 |
| Score (B) | 3 | 3- | 2+ | 2 | 2- | 1+ | 1 |

| | Score (A) Group (higher ratio means better condition) | Score (B) Group (higher ratio means worse condition) |
|---|---|---|
| **Housing Demand-Creation Factors** | | |
| 1. Population and Labour Force | Population growth, Labour force | |
| 2. Macroeconomic Performance | GDP at current price, Real GDP growth | Inflation rate, Unemployment rate |
| 3. Labour Condition | Monthly average wages and the growth | |
| 4. Price and Consumption | Household consumption for housing | Housing price inflation |
| 5. Housing Stocks | Dwellings per 1000 inhabitants, Owner occupied dwellings (homeownership) | |
| 6. Housing Quality | Dwellings with equipments, average useful floor space | Housing constructed before 1971 (old construction over 30 years; higher ratio means older construction), Households living under 50 m² |
| Housing Supply-Driving Factors | Dwellings completed per 1000 inhabitants, Occupied dwellings (from vacant dwellings), Private sector construction, Residential construction | Average useful floor space per dwellings completed (higher ratio means more luxury dwellings; i.e. low access to new dwellings for households) |

3. Country Assessment Sheet: All analyses above were translated into country assessment sheet in Table 1. In order to recalculate the average performance in each study country, 0.3 point is given to "+" and deducted from original point in "-" for convenience sake.

## TABLE OF CONTENTS