

RESIDENTIAL HOUSING

Helgi's Pocket Guide

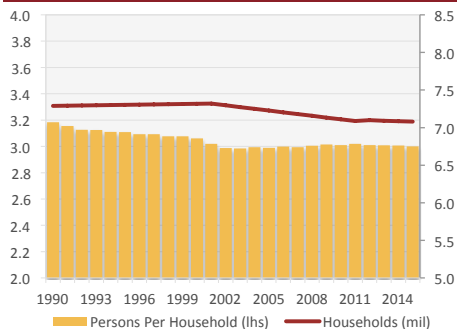
January 2013

Romania

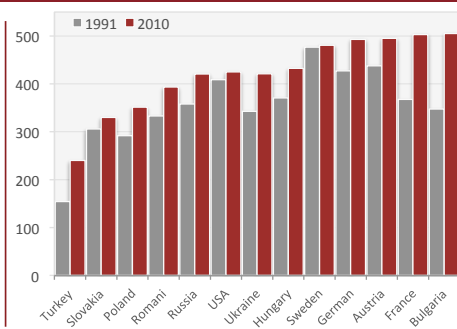
| RESIDENTIAL HOUSING AT A GLANCE | 1990 | 1995 | 2000 | 2005 | 2010 |
|--|------|------|------|--------|---------|
| Housing Stock (Number Of Dwellings), mil | 8.01 | 7.78 | 7.91 | 8.20 | 8.42 |
| Housing Stocks (sqm Per Person) | 12.2 | 12.8 | 13.4 | 14.4 | 15.4 |
| Persons Per Household | 3.18 | 3.11 | 3.06 | 2.99 | 3.01 |
| Dwellings Per Household | 1.10 | 1.07 | 1.08 | 1.13 | 1.18 |
| Average Size Of Dwelling (sqm) | 35.3 | 37.5 | 38.1 | 38.1 | 39.2 |
| Home Ownership (As % Of Total Dwellings) | 67% | | | 94% | 98% |
| New Dwellings Completed ('000) | 2.1 | 1.6 | 1.2 | 1.5 | 2.3 |
| House Price, Nationwide Average (USD) | | | | 37,323 | 66,285 |
| House Price, Capital City Average (USD) | | | | 74,646 | 132,570 |
| House Price To Gross Wage (Nationwide Average) | | | | 9.36 | 9.24 |
| Mortgage Loans (As Of GDP) | | | 0.2% | 1.7% | 5.6% |
| Loan To Value Ratio On Mortgage Loan Book | | | | 50% | 73% |
| Households With Mortgage Loan (As Of Total Households) | | | 1.1% | 2.3% | 3.8% |



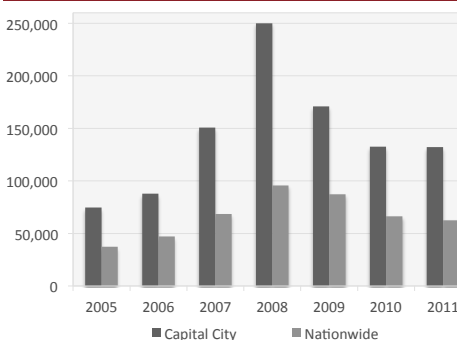
HOUSEHOLDS



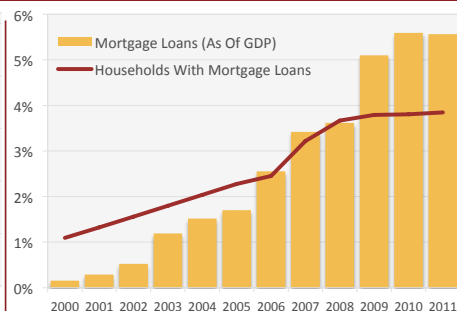
HOUSING STOCK (Dwellings Per 1,000 People)



HOUSE PRICES (USD)

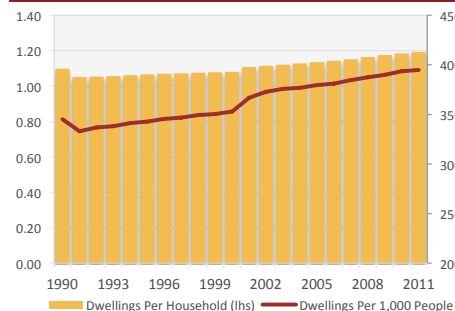


MORTGAGE LOAN PENETRATION

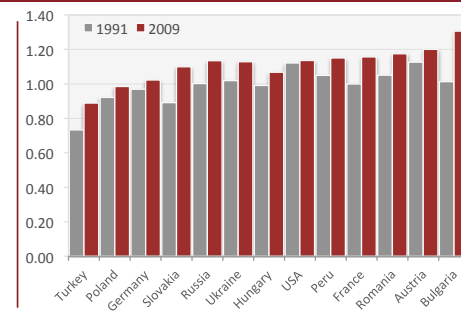


Source: World Bank, National Statistical Office, National Central Bank, OECD, United Nations, Helgi Analytics calculation

HOUSING STOCK

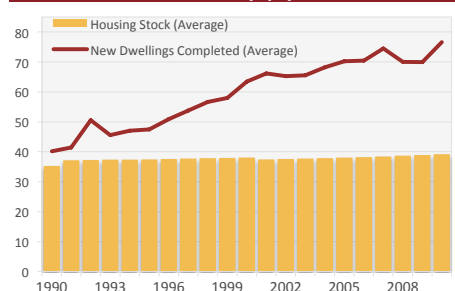


DWELLINGS (As Of Households)

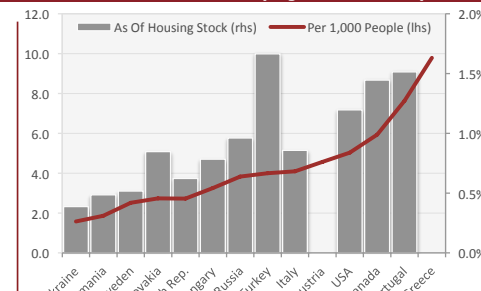


Romanians do not suffer from having nowhere to live. There are enough dwellings when compared to the total population, as well as the number of households. That's especially true following the 2011 population and housing census, according to which the stable Romanian population dropped to around 19 million (from over 23 mil two decades ago). In 2011, there were nearly 1.2 dwellings per household on average, above the European average. Similarly to other CEE countries, however, the quality of living and the size of living spaces are the main issues to tackle.

SIZE OF AVERAGE DWELLING (sqm)



NEW DWELLINGS COMPLETED (Avg. for 2000-2010)

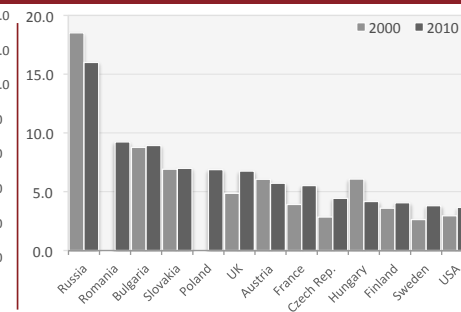


Around 40% of Romanian urban dwellings are represented by small prefabricated panel buildings. No wonder, then, that the average size of new dwellings built is nearly twice as large as that of the existing ones. However, Central Europe is still relatively too poor to upgrade its housing stock fast and to reach the Western European level. New dwellings built each year account for less than 1% of the total housing stock, which is half compared to what Western European countries add each year.

HOUSE PRICE, NATIONWIDE AVERAGE (USD)



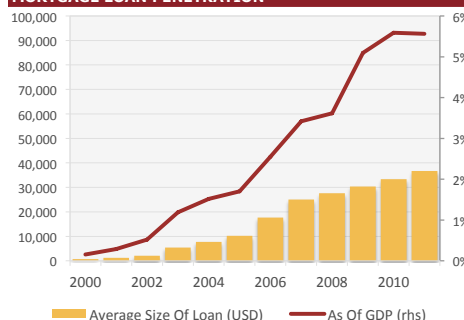
HOUSE PRICE TO GROSS WAGE



Romanian real estate prices have tripled over the last decade in USD terms, before they started falling again following the burst of the real estate bubble. The average dwelling cost around USD 60,000 in 2011. In Bucharest, Romania's capital city, however, you would pay over USD 120,000 for a flat of the same size. The affordability of housing has improved greatly in the last three years as prices have declined, though it would still take the average Romanian nine annual gross salaries to buy a flat (compared to nearly 12 in 2009).

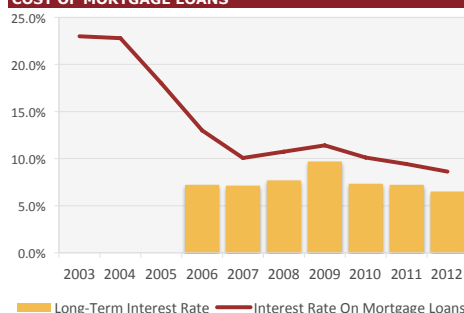
Source: World Bank, National Statistical Office, National Central Bank, OECD, United Nations, Helgi Analytics calculation

MORTGAGE LOAN PENETRATION



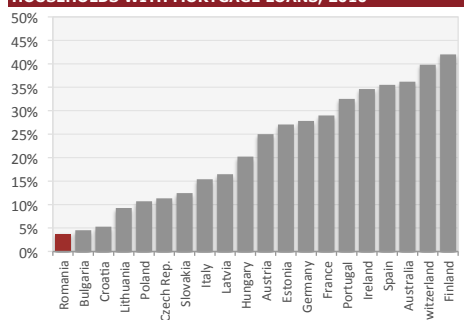
Mortgage loans started being properly provided in Romania in 2003 and the mortgage boom has been one of the key drivers of rising real estate prices in the country. From virtually nothing in 2002, mortgage loans represented 15% of banks' loans at the end of 2011. Having said that, mortgage loans remain relatively small as a share of the economy (measured by GDP), or when compared to more developed countries.

COST OF MORTGAGE LOANS



Similarly to Hungary and Poland, most Romanian mortgage loans were denominated in CHF or EUR to get as low an interest rate as possible when liquidity was ample. In 2009, more than 90% of Romanian mortgage loans were in foreign currencies, exposing mortgage holders to a hefty currency risk. With liquidity drying up and a few banks in Romania ceasing their activities, growth will be more balanced and more cautious in the future.

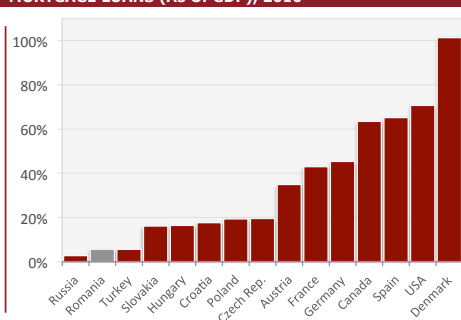
HOUSEHOLDS WITH MORTGAGE LOANS, 2010



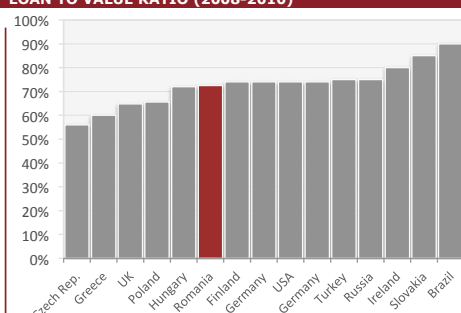
Unlike their Western and Central European peers, Romanians are little exposed to mortgage loan debt. More than 90% of Romanians own the dwelling they in live in and we estimate only around 4% of Romanians have a mortgage loan. This is compared to more than 10% in Central Europe and more than 20% in Eastern Europe.

Source: World Bank, National Statistical Office, National Central Bank, OECD, United Nations, Helgi Analytics calculation

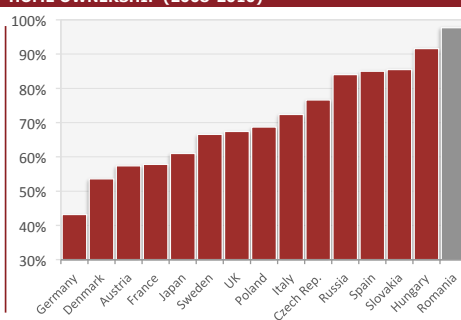
MORTGAGE LOANS (As Of GDP), 2010



LOAN TO VALUE RATIO (2008-2010)



HOME OWNERSHIP (2008-2010)



| POPULATION | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Population | mil | 21.7 | 21.7 | 21.6 | 21.6 | 21.5 | 21.5 | 21.5 | 21.4 | 21.4 |
| Population (As % Of World Population) | % | 0.34% | 0.34% | 0.33% | 0.33% | 0.32% | 0.32% | 0.32% | 0.31% | 0.31% |
| Persons Per Household | persons | 2.98 | 2.99 | 2.99 | 3.00 | 2.99 | 3.00 | 3.01 | 3.01 | 3.02 |
| Share Of Population (0-14 Years Of Age) | % | 17% | 16% | 16% | 15% | 15% | 15% | 15% | 15% | 15% |
| Share Of Population (15-64 Years Of Age) | % | 69% | 69% | 70% | 70% | 70% | 70% | 70% | 70% | 70% |
| Share Of Population (65+ Years Of Age) | % | 14% | 15% | 15% | 15% | 15% | 15% | 15% | 15% | 15% |
| Median Age | years | 35.9 | 36.3 | 36.7 | 37.0 | 37.4 | 37.7 | 38.1 | 38.4 | 38.7 |
| Old Age Dependency Ratio | % | 21% | 21% | 21% | 21% | 21% | 21% | 21% | 21% | 22% |
| Youth Dependency Ratio | % | 24% | 23% | 22% | 22% | 22% | 22% | 22% | 22% | 22% |
| Life Expectancy, both sexes | years | 71.3 | 71.6 | 71.9 | 72.2 | 72.6 | 72.6 | 73.3 | 73.5 | |
| Life Expectancy At 65, both sexes | years | 14.6 | 14.9 | 15.0 | 15.2 | 15.6 | 15.8 | 15.8 | 15.8 | |
| Total Fertility Rate | children | 1.27 | 1.29 | 1.32 | 1.32 | 1.30 | 1.35 | 1.38 | 1.38 | |
| Urban Population As Of Total | % | 53% | 53% | 53% | 53% | 53% | 53% | 53% | 53% | |

| HOUSING | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Housing Stock (Number Of Dwellings) | mil | 8.15 | 8.18 | 8.20 | 8.23 | 8.27 | 8.33 | 8.39 | 8.42 | 8.45 |
| Size Of Dwelling (Average) | sqm | 37.7 | 37.9 | 38.1 | 38.2 | 38.4 | 38.7 | 38.9 | 39.2 | |
| Number Of Households | mil | 7.27 | 7.25 | 7.23 | 7.20 | 7.18 | 7.16 | 7.13 | 7.11 | 7.09 |
| Persons Per Household | persons | 2.98 | 2.99 | 2.99 | 3.00 | 2.99 | 3.00 | 3.01 | 3.01 | 3.02 |
| Dwellings Per Household | dwellings | 1.12 | 1.13 | 1.13 | 1.14 | 1.15 | 1.16 | 1.18 | 1.18 | 1.19 |
| Dwellings Per 1,000 People | dwellings | 376 | 377 | 380 | 381 | 385 | 387 | 390 | 393 | 395 |
| Home Ownership (As Of Total Dwellings) | % | | 94% | | | | | 97% | 98% | 98% |
| Social-Rental Dwellings (As Of Total Dwellings) | % | | | | | | | 2.7% | | |
| Market-Rental Dwellings (As Of Total Dwellings) | % | | | 6.0% | | | | 0.8% | | |
| Housing Stock (Total Size Of Dwellings In sqm) | mil sqm | 307 | 310 | 312 | 315 | 318 | 322 | 326 | 330 | |
| Housing Stocks (sqm Per Person) | sqm | 14.2 | 14.3 | 14.4 | 14.6 | 14.8 | 15.0 | 15.2 | 15.4 | |
| Number Of Rooms | mil | 21.0 | 21.1 | 21.2 | 21.3 | 21.4 | 21.6 | 21.8 | 22.0 | 22.2 |
| Rooms Per Person | rooms | 0.97 | 0.97 | 0.98 | 0.98 | 1.00 | 1.01 | 1.02 | 1.03 | 1.04 |
| Rooms Per Dwelling | rooms | 2.57 | 2.57 | 2.58 | 2.58 | 2.59 | 2.60 | 2.60 | 2.61 | 2.62 |
| New Dwellings Completed | '000 units | 29.1 | 30.1 | 32.9 | 39.6 | 47.3 | 67.3 | 62.5 | 48.9 | 45.4 |
| Dwellings Completed Per 1,000 People | dwellings | 1.34 | 1.39 | 1.52 | 1.84 | 2.20 | 3.13 | 2.91 | 2.28 | 2.12 |
| New Dwellings Completed (As Of Total Dwellings) | % | 0.36% | 0.37% | 0.40% | 0.48% | 0.57% | 0.81% | 0.75% | 0.58% | 0.54% |
| Living Space Per Dwelling Completed (Average) | sqm | 65.5 | 68.2 | 70.2 | 70.5 | 74.5 | 70.0 | 69.9 | 76.6 | 76.5 |
| New Dwellings Started | '000 units | 27.6 | 34.3 | 43.5 | 51.1 | 56.6 | 61.1 | 48.8 | | |
| Number Of Dwellings Sold / Transferred | '000 units | | | 535 | 682 | 521 | 484 | 352 | 352 | 372 |
| Dwellings Sold (As Of Total Dwellings) | % | | | 6.5% | 8.3% | 6.3% | 5.8% | 4.2% | 4.2% | 4.4% |

| PRICE & VALUATION | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---------------|--------|--------|--------|---------|---------|---------|---------|---------|------|
| House Price (Nationwide Average) | USD | 37,323 | 47,085 | 68,525 | 95,602 | 87,175 | 66,285 | 62,584 | | |
| House Price (Capital City Average) | USD | | 74,646 | 87,892 | 150,755 | 250,036 | 170,863 | 132,570 | 132,122 | |
| Monthly House Rent (Nationwide Average) | USD per month | | | | | | | | | |
| Monthly House Rent (Capital City Average) | USD per month | | | | | | | | | |
| House Price To Rent (Nationwide Average) | years | | | | | | | | | |
| House Price To Rent (Capital City Average) | years | | | | | | | | | |
| Residential Rental Yield (Nationwide Average) | % | | | | | | | | | |
| Residential Rental Yield (Capital City Average) | % | | | | | | | | | |
| House Price To Gross Wage (Nationwide Average) | years | | | 9.36 | 9.61 | 9.96 | 11.40 | 12.00 | 9.24 | 8.03 |
| House Price Per sqm, USD (Nationwide Average) | USD per sqm | | | | | | | | | |
| House Price Per sqm (Capital City Average) | USD per sqm | | | | | | | | | |
| Price Of Land For Residential Building (Nationwide) | USD per sqm | | | | | | | | | |
| Price Of Land For Residential Building (Capital City) | USD per sqm | | | | | | | | | |

| MORTGAGE LENDING | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|--|---------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| Mortgage Loans | USD mil | 709 | 1,146 | 1,685 | 3,131 | 5,789 | 7,236 | 8,211 | 9,036 | 10,004 |
| Mortgage Loans (As Of GDP) | % | 1.2% | 1.5% | 1.7% | 2.6% | 3.4% | 3.6% | 5.1% | 5.6% | 5.6% |
| Mortgage Loans Per Capita | USD | 33 | 53 | 78 | 145 | 269 | 337 | 382 | 422 | 467 |
| Mortgage Loan Interest Rate (Average, CZK) | % | 23.0% | 22.8% | | | 10.1% | 10.7% | 11.4% | 10.1% | 9.4% |
| LVR On Mortgage Loan Book (Nationwide Average) | % | | | 50% | 58% | 75% | 89% | 68% | 73% | 68% |
| Number Of Mortgage Loans | mil | 0.13 | 0.15 | 0.16 | 0.18 | 0.23 | 0.26 | 0.27 | 0.27 | 0.27 |
| Average Size Of Mortgage Loan | USD | 5,424 | 7,765 | 10,247 | 17,722 | 25,083 | 27,591 | 30,350 | 33,385 | 36,724 |
| Households With Mortgage Loan (As Of Total) | % | 1.8% | 2.0% | 2.3% | 2.5% | 3.2% | 3.7% | 3.8% | 3.8% | 3.8% |
| Number Of Mortgage Loans (As Of Housing Stock) | % | 1.6% | 1.8% | 2.0% | 2.1% | 2.8% | 3.1% | 3.2% | 3.2% | 3.2% |

Source: World Bank, National Statistical Office, National Central Bank, OECD, United Nations, Helgi Analytics calculation. For more details, description and explanation of particular indicators, please, visit www.helgilibrary.com

| MACROECONOMIC ROUND-UP | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---------|-------|-------|-------|--------|--------|--------|-------|-------|-------|
| GDP | USD bil | 59.5 | 75.5 | 98.9 | 122.6 | 169.3 | 200.1 | 161.1 | 161.6 | 179.8 |
| GDP Growth | % | 5.2% | 8.4% | 4.2% | 7.9% | 6.0% | 9.4% | -8.5% | 1.0% | -0.4% |
| GDP Per Capita | USD | 2,737 | 3,481 | 4,572 | 5,681 | 7,856 | 9,300 | 7,500 | 7,539 | 8,405 |
| Industrial Production Growth | % | -0.8% | 2.7% | -3.1% | 9.3% | 10.4% | 2.6% | -5.5% | 5.5% | |
| Retail Sales Growth | % | | | | | | | | | |
| Government Budget Balance (As % Of GDP) | % | -1.5% | -1.2% | -1.2% | -2.2% | -2.5% | -5.4% | -7.4% | -6.8% | |
| Public Debt (As % Of GDP) | % | 21% | 19% | 18% | 13% | 13% | 14% | 24% | 31% | 33% |
| Unemployment Rate | % | 7.4% | 6.3% | 5.9% | 5.2% | 4.0% | 4.4% | 7.8% | 7.0% | 5.2% |
| Gross Average Monthly Wage | USD | 200 | 251 | 332 | 408 | 573 | 699 | 606 | 598 | 649 |
| Foreign Debt (As % Of GDP) | % | 38% | 39% | 39% | 44% | 50% | 50% | 74% | 76% | 0% |
| Imports (As % Of GDP) | % | 42% | 45% | 43% | 39% | 43% | 44% | 40% | 30% | 29% |
| Exports (As % Of GDP) | % | 35% | 36% | 33% | 30% | 31% | 31% | 33% | 24% | 22% |
| Current Account Balance (As % Of GDP) | % | -5.6% | -8.5% | -8.6% | -10.4% | -13.4% | -11.6% | -4.2% | -4.5% | -4.4% |
| Foreign Exchange Reserves (Including Gold) | USD bil | 9.4 | 16.1 | 21.6 | 30.2 | 40.0 | 39.8 | 44.4 | 48.0 | 48.0 |
| Foreign Exchange Reserves (As % Of Imports) | % | 38% | 47% | 50% | 64% | 55% | 45% | 69% | 100% | 92% |
| Foreign Direct Investments | USD bil | 1.8 | 6.4 | 6.9 | 11.5 | 10.3 | 13.8 | 4.9 | 3.2 | 2.6 |
| Foreign Direct Investments (As % Of GDP) | % | 3.1% | 8.5% | 6.9% | 9.3% | 6.1% | 6.9% | 3.1% | 2.0% | 1.4% |
| Foreign Direct Investments (As % Of CA Deficit) | % | 56% | 101% | 81% | 90% | 45% | 59% | 73% | 45% | 32% |
| Workers' Remittances, Received (As % Of GDP) | % | 0.2% | 0.2% | 4.8% | 5.4% | 5.0% | 4.6% | 3.0% | 2.4% | 2.2% |
| Portfolio Investments (As % Of GDP) | % | 1.0% | -0.7% | 1.0% | -0.2% | 0.4% | -0.4% | 0.5% | 0.8% | 1.4% |
| Development Assistance (As % Of GDP) | % | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% | 0.0% |

| INFLATION, FOREX & INTEREST RATES | | 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 |
|---|---------|-------|-------|-------|------|------|-------|-------|------|-------|
| Inflation, CPI (Average) | % | 15.3% | 11.9% | 9.0% | 6.6% | 4.8% | 7.8% | 5.6% | 6.1% | 5.8% |
| Long-Term Interest Rate (10-Year Gov. Bond Yield) | % | | | | 7.2% | 7.1% | 7.7% | 9.7% | 7.3% | 7.2% |
| Short-Term Interbank Interest Rate (3-Month) | % | 17.7% | 19.1% | 8.4% | 8.1% | 7.2% | 12.3% | 11.3% | 6.5% | |
| Interest Spread To USD, 10-Year Gov. Bond | % | -4.0% | -4.3% | -4.3% | 2.4% | 2.5% | 4.0% | 6.4% | 4.1% | 4.4% |
| Interest Spread To USD, 3M IBOR | % | 16.6% | 17.6% | 4.8% | 2.9% | 2.0% | 9.1% | 10.4% | 6.0% | -0.4% |
| FX Rate To USD (Average) | per USD | 3.32 | 3.26 | 2.91 | 2.81 | 2.44 | 2.52 | 3.05 | 3.18 | 3.05 |
| FX Rate To EUR (Average) | per EUR | 3.75 | 4.05 | 3.62 | 3.52 | 3.34 | 3.68 | 4.24 | 4.21 | 4.24 |

Source: World Bank, National Statistical Office, National Central Bank, OECD, United Nations, Helgi Analytics calculation. For more details, description and explanation of particular indicators, please, visit www.helgilibrary.com



www.HelgiAnalytics.com

ABOUT HELGI ANALYTICS

Helgi Analytics is a consulting company based in the Czech Republic. The company mainly provides consultancy in the area of financial services and real estate and focuses primarily on the region of Central and Eastern Europe.

Helgi Analytics also runs a web application called Helgi Library, which is a database/library offering data and analyses on more than 95% of the world's economy and population. The Library aims to bring interesting statistical data and analyses to a wide audience under affordable conditions. If you wish to get more details, please visit www.helgilibrary.com or contact us at info@helgianalytics.com.

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