Income inequality and age heterogeneities

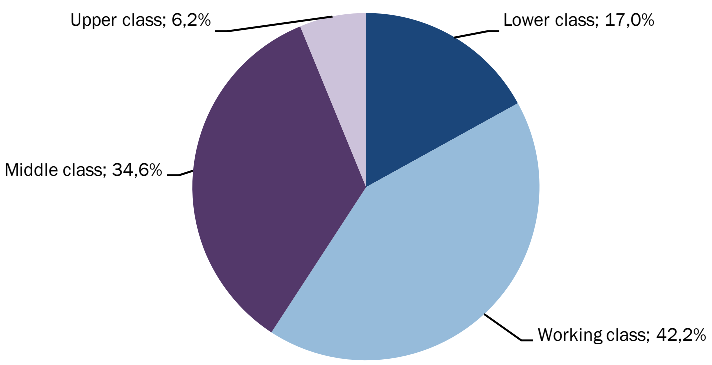
Despite the jobless growth of the Ukrainian economy, we assume that the current official level of income inequality does not impact traditional tradeoff between an immediate boost in public consumption and repayment of sovereign debt. Quite high probability of the power centralization scenario means low probability of the Government's capitulation to the increasing "popular" demand for default, due to income inequality. Nonetheless, the modern profile of Ukraine's economic growth, with its high reliance on export-oriented industries, could intensify inequality (as in the period 2000-2005, when rising export proceeds had a positive impact on the incomes of the upper-medium group only. Moreover, current official figures for income inequality may be too low, as long as the shadow economy (est.40% of GDP) is responsible for a high share of undeclared salaries.

The other problem is the worsening age heterogeneities, as the older generation – with little concern for the country's access to capital markets – could force a default on debt. We believe that these factors may adversely affect the probability of a sovereign debt default in the long-term period and continue to monitor them carefully...

When estimating income inequality in Ukraine, we should point out the pressure that it places on the probability of sovereign debt rescheduling. Sovereign default is a form of redistributive policy and involves an inter-temporal tradeoff between an immediate boost in public consumption and a future tax increase. The poorer the voters, the lower their awareness of the future efficiency cost of default. The majority's demand for sovereign default, then, is bigger, as income distribution skews. Hence, the higher risk of a democratic government's capitulation to popular demand for default.

The United Nations Human Development Report of 2010 offers several dimensions of inequality. In Ukraine, income distribution is the major problem. Some sociologists classify less than 35% of Ukrainian population as middle class. On the other hand, there is a huge gap in income levels of the rich, ultra-rich (6%) and the poor (17%).

Population structure



Source: Centre of Social Research "Sofia", December 2010

The UN 2010 Human Development Index (HDI) ranks Ukraine (with its value of 0.71) 69th among countries with high human development. At the same time, inequality-adjusted HDI (IHDI) is 8.1% lower than its non-adjusted value. However, the difference between HDI and IHDI (indirect measure of inequality) is less than the median amount of 0.08 for selected countries. Moreover, **the World Bank estimates income inequality at 28.1 (2008 Gini index), which is much lower than in Brazil (57.0), Russia (39.9) and Poland (34.5).** What's more, the Gini coefficient in Eastern European countries (including Ukraine) is one of the lowest in the world (only the Scandinavian countries and Japan have had invariably lower rates), which partly explains the social cohesion of the region's population, faced with the large-scale austerity programs implemented after the financial crisis.

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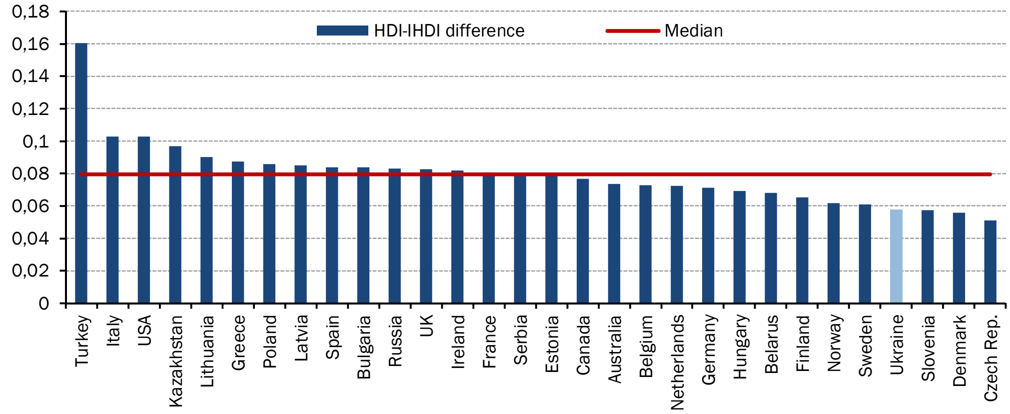
Difference between HDI and IHDI (indirect measure of inequality)



Source: United Nations Human Development Report 2010

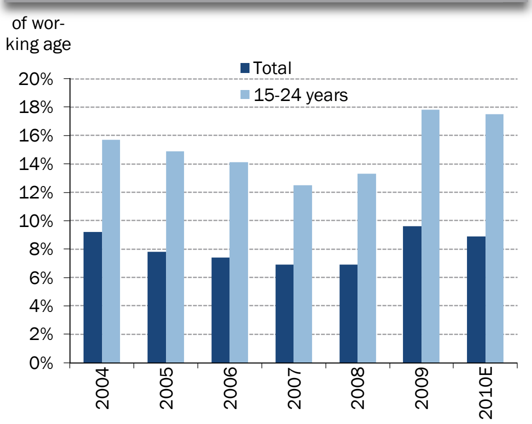
Nonetheless, income inequality in Ukraine may be not as low as reported above. The credit boom of 2005-2008 – with opportunities for access to foreign-currency loans – could have increased the level of income inequality in Ukraine more significantly than indicated by the Gini index. Additional revenue from higher export revenues doubled in 2004-2008 and had a positive impact on the income of the upper-medium group. Mentioned upsurge in revenues is contributed to the commodity boom, given that 55% of Ukraine's exports are steel billets, iron ore and chemical products. At the same time, 2005-2008 economic developments led to a decline in real incomes for much of the population, due to adverse inflationary effects, rising prices for imported goods and FX devaluation in 2008. Moreover, current official figures for income inequality may remain low, as long as the shadow economy (est.40% of GDP) accounts for a high share of those receiving high unofficial salaries.

Income inequality in Ukraine may not be as low as officially reported

Another drawback in estimating income inequality is the adverse situation with unemployment. The rate of open unemployment (according to ILO methodology) was 6.5% in Q3 2008 (beginning of the economic crisis in Ukraine), increasing to 9.9% by mid-2009 (crisis escalation). The unemployment rate remained almost at that plateau afterwards, despite the rapid surges in GDP and exports. For instance, over 2010, the unemployment rate has decreased from 9.8% to 8.8% only. Open joblessness is a severe problem, in particular, among the young urban labor force (15-24 years) reaching an estimated 17.5% in 2010, versus 10.2% in 2007.

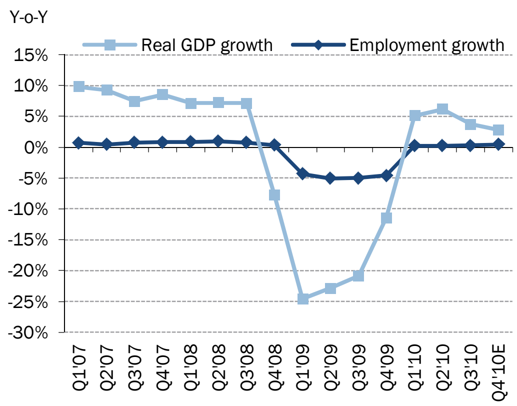
The unemployment rate remained almost at that plateau in 2010

Unemployment rate



Source: State Statistics Committee, AYA's estimations and calculation

Annual Growth in Real GDP and Employment



Source: State Statistics Committee, AYA's estimations and calculation

Notes: we plot the quarterly growth rates in real GDP and contrast the y-o-y rates of change in labor employment. In order to make comparisons meaningful, the changes in labor employment is calculated relative to the same period of the previous year

Yet the most striking observation on the Ukrainian labor markets over the post-2009 crisis era is the sluggish performance of the economy's job-creation capacity. Despite very rapid performance growth across industry (+11% in 2010) and services, employment growth was minimal. This phenomenon, which is actually an attribute of many other developing economies, is characterized as *"jobless -growth"* in the literature. In Ukraine, this problem manifests itself in meager employment generation, despite the relatively rapid growth conjuncture after the 2009 drop-off.

The average for 2010 reveals a rise in employment of 85,000 workers (+0.5% Y-o-Y). Due to demographic pressures, however, over the same period the number of people in the 15+ age group is expected to increase, thus the number of unemployed has receded by even a smaller number. When we compare this fact to expected growth of 4.1% in real GDP over 2010 as a whole, one is bound to raise concerns about the dynamics and employment capabilities of such growth.

Lagging employment creates an output gap between actual and potential GDP

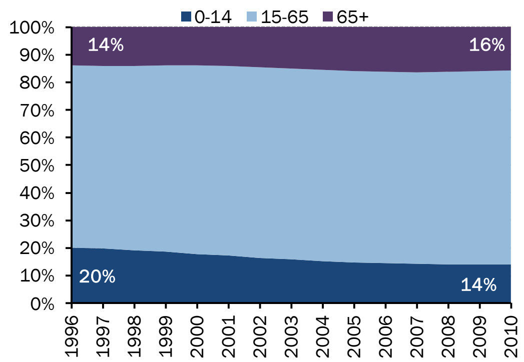
Lagging employment creates an output gap between actual and potential GDP values. We assume that the unemployment rate will eventually decrease in 2011, down to 8% e-o-p, bringing the economy towards a path of gradual growth. The most dynamic sectors (machine-building, trade and infrastructure construction, as expected) should be relatively more labor-absorbing in our view. Moreover, structural and frictional unemployment should decrease piecemeal, as former workers in depressed industries (construction, financials, etc.) find new jobs. Surely, when a current positive output gap is open, theory says that inflation tends to decline; however some troublesome external trends on food market and Ukraine's liabilities under IMF memorandum may undermine that thesis.

Another emerging problem in Ukraine is that of age heterogeneity. Again, this also affects the probability of sovereign debt rescheduling. The main incentive for repaying sovereign debt is to maintain access to international capital markets. However, in a democracy, one generation may choose default, regardless of its consequences for future generations. The older generation – with little concern for its country's access to capital markets – can force a default on debt, if it holds the majority of voters. On the other hand, if the younger generation is more numerous, it can force repayment of debt previously defaulted.

The proportion of working-age to total population may decrease from 71% in 2010 to 59% by 2050

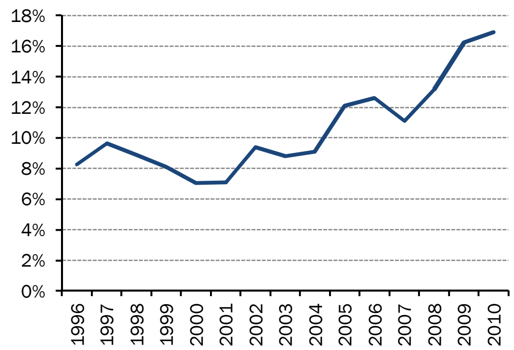
In Ukraine, the problem of the aging population is very serious, factoring in the decrease in total population, rise of the proportion of citizens aged 65+ in the total population and one of the lowest pension levels in CEE, which would require gradual increases every year. According to UN projections, the proportion of the working-age population to total population will decrease from 71% in 2010 to 59% by 2050 – assuming that the average annual population growth rate will be minus 0.65%.

Age structure of Ukrainian population



Source: State Statistics Committee, AYA Capital calculations

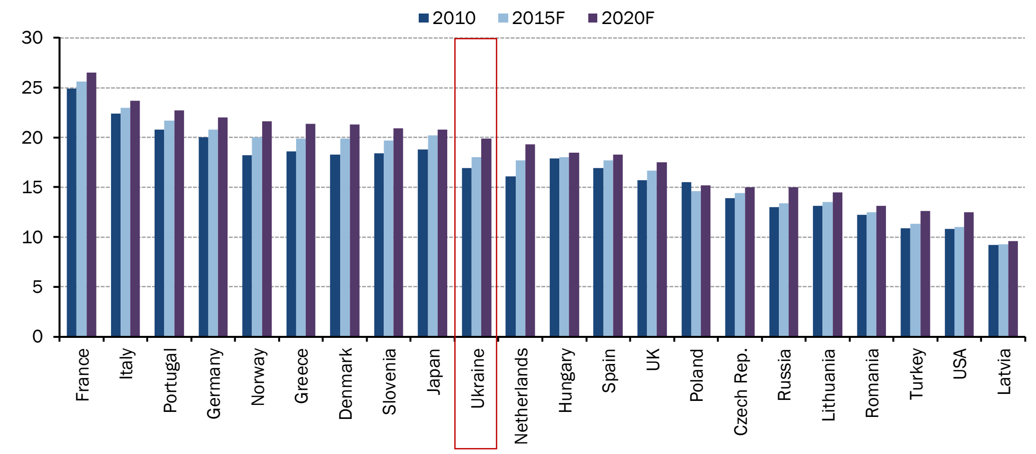
Pension spending / GDP ratio



Source: State Statistics Committee, AYA Capital calculations

Taking into account the aforementioned trends, an increase in the already excessively high share of pension expenditure in GDP of Ukraine (18%) by another 11 percentage points of GDP in 2050 may occur. The level of pension expenditures in Ukraine is among the highest in the world, exceeding only the indicators for Italy (which is expected to decline, due to higher average retirement age and restrictions on pension payments).

Pension spending / GDP ratio



Source: S&P Global Aging 2010

Both of the mentioned issues may negatively affect the country's ability to repay its sovereign debt in the long run, as they:

1. increase incentives for default;
2. severely influence the state pension fund with a decrease of working-age population.

However, Ukraine might face the situation in much more positive light, if the government implements the upcoming pension reform, currently under discussion with the IMF. The reform includes such pillars as a gradual increase of the retirement age and popularization of non-government pension funds. On the other hand, pension reform could be harmful for the younger population, which will face see a reduction in employment opportunities. That creates a conflict of interests and moreover, increases the possibility of public protests, given that the younger population is traditionally the most politically active.

Pension reform could be harmful to the younger population and increases the possibility of public protests

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