Poverty and Social Exclusion in Bosnia and Herzegovina
Insights from the 2011 Extended Household Budget Survey
POVERTY AND SOCIAL EXCLUSION IN BOSNIA-HERZEGOVINA.
INSIGHTS FROM THE 2011 EXTENDED HOUSEHOLD BUDGET SURVEY¹

¹ This note is an output of the Western Balkans Programmatic Poverty Assessment. It has been produced by a World Bank team composed by Lidia Ceriani and Caterina Ruggeri Laderchi in close collaboration with the Agency for Statistics of BiH, FBiH Institute for Statistics and RS Institute for Statistics. Early findings from this work have been presented at a workshop attended by technical staff of the Statistical Agencies.
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1 Introduction

In 2011 the statistical authorities of Bosnia-Herzegovina collected for the first time a national survey which allows monitoring the European indicators of poverty and social exclusion as well as national indicators of absolute and relative consumption poverty. The Extended Household Budget Survey (EHBS) adds extra modules to a standard Household Budget Surveys (HBS) designed to collect detailed information on household expenditures. The additional modules covered the information needed to measure poverty and social exclusion in EU Member states. In this way, the EHBS represents a hybrid solution between collecting a HBS and a Survey of Income and Living Conditions (SILC)\(^2\), the official tool for measuring poverty and social exclusion in the EU, which omits expenditure information.

The survey design of the 2011 EHBS reflects the recommendations of an expert panel convened by DFID, Eurostat, and the World Bank among others to explore strategies for Western Balkan countries to adapt to some of the requirements of the European Union statistical acquis (Carletto et al 2013). In particular, the additional modules are administered on a rotating basis not to overburden respondents. Data from the field suggest that the additional modules increase the total interview time by about 15-20 minutes, relative to the standard HBS questionnaire. The non-response rate in the 2011 EHBS is higher than in the previous HBS survey round (24 percent and 19.5 percent respectively), but there is no evidence, inclusively from the 2009 survey pilot, that this increase in the non-response rate is due to the introduction of the social exclusion modules. In addition, the expenditure modules remain the same in the 2007 and 2011 rounds of the survey, allowing for comparability of poverty statistics in the expenditure space. Some changes have been made to the income module of the HBS, which improved the ability of the survey instrument to capture various income sources of the household, but capturing income information effectively remains challenging.\(^3\)

As the EHBS represents a pilot of the recommendations put forward by the expert panel, it is of interest not only for understanding poverty and exclusion in BiH, but also as an example of how to reconcile monitoring consumption based poverty measures while adopting also the EU statistical acquis on monitoring poverty and social exclusion. Being able to monitor both types of indicators is particularly important as they capture different aspects of deprivation. The consumption based poverty measures which were typically monitored in BiH reflect an emphasis on inadequate monetary resources, as identified by either an absolute standard (inability to cover basic needs) or a relative one, dependent on the national context. The indicators of poverty and social exclusion adopted at the EU level try to capture a multidimensional concept of deprivation, encompassing the command of resources necessary to participate in the life of a society beyond satisfying basic needs and the processes of exclusion, particularly those arising in the labour market.

The concept of social exclusion does not lend itself to an easy definition beyond these principles, but it allows countries in the EU to use a common framework for analyzing deprivation, while emphasizing the specific characteristics, and hence the policy solutions, more relevant to national circumstances. The way the concept of exclusion and its measurement have been developed, reflect the evolution of policy dialogue among EU member states in the context of an open method of coordination, i.e. policy

\(^2\) The EU-SILC became a requirement for EU member states under the Framework Regulation 1177/2003. While its implementation is compulsory each country has to develop its own national surveys or administrative registers to support the implementation of SILC. SILC is meant to be implemented annually with a common component every year (primary variables) and rotating modules which are alternated in different years (secondary variables). The survey also includes a longitudinal component, which calls for a rotating panel sample structure.

\(^3\) Reported incomes are less than half the level of consumption expenditures on average, and the expenditure/income ratio increases for wealthier households.
dialogue and the exchange of experiences in an area of national competence such as social policy (Maquet 2013). While a number of primary and secondary indicators have been developed to inform the open method of coordination, the “headline figure” for poverty and social exclusion in the EU has become the share of population at risk of poverty or social exclusion (AROPE) which has been set as one of the 5 goals of the EUROPE 2020 strategy adopted by EU heads of state in June 2010.4

Given the central role of this indicator, in this note we will take AROPE and its component indicators as the key indicators to analyze social exclusion in BiH. Other dimensions of wellbeing for which indicators have been collected by the EHBS will also be discussed. Finally, and given the relative novelty of the analysis of exclusion as a source of information to inform policy discussions in the Western Balkans, a brief analysis of the relation between indicators of exclusion and more established indicators of absolute consumption poverty will be presented. This note also exploits the availability of comparable indicators collected through the SILC survey in EU Member States to benchmark BiH’s performance in terms of the different indicators.

The note is structured as follows: section 2 presents a detailed description of the data, while section 3 discusses the three constituent indicators of AROPE, and their mutual relation, i.e. their union (the AROPE indicator) and their intersection. Section 4 presents additional dimensions of exclusion on which data have been collected, especially those relating to children. Finally section 5 presents a comparison of indicators of monetary poverty and social exclusion. Section 6 summarizes the most interesting elements which have emerged from this analysis and concludes.

2 Data description
The sample of the 2011 EHBS includes a total of 7,400 households (4,611 in FBiH, 2,437 in RS and 352 in BD), adding up to a total of 22,863 individuals.

The core HBS provides household-level data recorded on the 14 days recall diary of purchases plus household- and individual-level data recorded during the final interview, which is structured in eleven modules. The first module provides basic demographic characteristics, literacy level and education status for all individuals; activity status and other labour market indicators (e.g. branch of economic activity, occupation, professional status) for all household members age 15 and plus. Modules two to ten collect household-level information. This includes information on: dwellings’ features (construction type and characteristics, services, legal status of use) and expenditures linked to dwellings (e.g. utilities bills and maintenance costs); furnishing, household equipment and routine household maintenance expenditures; clothing and footwear expenditure; health-related expenditures; vehicles (ownership and related expenditures), parts, equipment, transport tickets and communication expenditures; expenditures linked to recreation activities, (e.g. television sets or hobbies); cultural activities (e.g. theater tickets and subscription to newspapers); education (e.g. registration fees, purchases of textbooks, school bus); vacation: miscellaneous expenditures (mainly personal services and extraordinary expenditures); household’s purchasing habits, and it collects, for a set of articles the preferred purchasing place (traditional shop, department store, super market, open market, kiosk or other); the value of investments or dis-investments made by the household, with respect to dwellings, business and agricultural activities, valuables and securities. Modules eleven and twelve are administered to each household members age 15 and plus. They include information on incomes received the month before the interview, as well as the number of months each income has been collected in the last year for two sets of income sources: returns of labor, capital, land or premises and private transfers (listed in 23 different sources), and from pension and social assistance (listed in 31 different sources).

4 The other 4 targets relate to employment, R&D, Climate change, and education.
With respect to the original core HBS described above, the 2011 EHBS includes a detailed income module and two additional modules, each administered to half of the population sample through a rotation scheme. The first additional module covers the topic *Social Inclusion, Migration and Remittances*. It contains information for each household members aged 15 and over with respect to migration and current residential status, remittances, life satisfaction; and provides information about social inclusion at the household level. The second additional module concerns *Health Status and Services*. It contains 31 questions on health conditions and the use of health services administered to each household member. Both modules contain a set of questions for the whole group of children under 16 in the household with respect to child material deprivation and social inclusion.

An important characteristic of the EHBS is that significant efforts were made to raise the quality of the income variable, given concerns that the usual difficulties of collecting income data are compounded in lower income settings, characterized by a high incidence of agricultural and informal activities. Box 1 details how the income variable has been constructed, and the differences between the expenditure and income variables. As it is generally assumed that the quality of expenditure data in lower income settings is higher, BOX 1 suggests that the income variable might be significantly underestimating household resources.

In addition, the 2011 EHBS contains specific questions to assess children’s deprivation status in four different dimensions: clothing, food, education, leisure and social life, in line with the ad-hoc module introduced in EU-SILC 2007 integrating a concern with the well-being and social inclusion of children into all areas of policy making. These questions were answered by households with at least one child below age 16 (33 percent of the sample, 35 percent in rural areas and 31 percent in urban areas). Questions refer to children aged under 16 in the whole household. If at least one child does not have the item or do not participate in the activity asked in the question, the whole group of children in the household is assumed not to have the item or not to participate to the activity.
Section 11 in the 2011 HBS is dedicated to Income, Pensions, Social Benefits and Household Savings. The equivalized disposable income \( (y_{eq}) \) is obtained by dividing total household income \( (y_{hh}) \) by the equivalized household size \( (n_{eq}) \).

Total household income is the sum of net incomes from employment, property, remittances and other sources, pension and social benefits for all members in the household. Since the dataset provides information both on the last monthly amount received and on the number of months the income/pension/benefit has been received over the last 12 months, the analysis takes the average monthly income received in the last year. Missing values are the 3 percent of the population, and no imputation technique has been implemented. Another 4 percent of the population declares zero income. Income is not spatially deflated (i.e. adjusted for the difference in food-prices in different population strata), as it is the case for the expenditure aggregate officially used in Bosnia and Herzegovina to compute poverty.

The equivalized household size is obtained by applying the OECD modified scale, which assigns a value of 1 to the household head, of 0.5 to each additional adult member and of 0.3 to each child aged less than 14:

\[
n_{eq} = 1 + \sum_{age\geq15} 0.5 + \sum_{age<14} 0.3
\]

According to the data, in 2011, the median equivalized household income was equal to 4,251 KM per year (or 354 KM per month). As Figure 1 shows, the distribution of income differs from the distribution of expenditure in the Household Budget Survey. About 7 percent of individuals declare income equal to zero, and on average, expenditure is 45 percent higher than income.

**Figure 1: Comparison between Income and Expenditure distribution**

![Graph showing comparison between income and expenditure distribution](image)

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
Note: The graph show the smoothed distribution of the logarithm per capita income and expenditure, at 2011 prices

### 3 The population at risk of poverty or social exclusion in BiH

This section analyzes the different indicators of social exclusion which comprise AROPE, the share of population at risk of poverty or social exclusion (BOX 2Error! Reference source not found.). As comparable indicators are available for all EU member states and other neighboring countries
comparisons with the incidence of different deprivation in these countries are presented to benchmark BiH’s assessment.

**BOX 2: Eurostat’s definition of at risk of poverty or social exclusion**

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>at risk of poverty</td>
<td>the share of people with an equivalised disposable income (after social transfer) below the at-risk-of-poverty threshold, which is set at 60 % of the national median equivalised disposable income after social transfers</td>
</tr>
<tr>
<td>severely materially deprived</td>
<td>the percentage of the population that cannot afford at least four of the following nine items: (i) to pay their rent, mortgage or utility bills; (ii) to keep their home adequately warm; (iii) to face unexpected expenses; (iv) to eat meat or proteins regularly; (v) to go on holiday; (vi) a television set; (vii) a washing machine; (viii) a car; (ix) a telephone.</td>
</tr>
<tr>
<td>living in a household with a very low work intensity</td>
<td>the number of persons living in a household having a work intensity below a threshold set at 0.20, where the work intensity of a household is the ratio of the total number of months that all working-age household members have worked during the income reference year and the total number of months the same household members theoretically could have worked in the same period (a working-age person is a person aged 18-59 years, with the exclusion of students in the age group between 18 and 24 years). Households composed only of children, of students aged less than 25 and/or people aged 60 or more are completely excluded from the indicator calculation.</td>
</tr>
</tbody>
</table>

### 3.1 At-risk-of-poverty profile

In the whole country, 27 percent of population is at-risk-of-poverty. In other words, roughly two every seven individuals in the population have an equivalised disposable income after social transfers below 60 percent of the national median (which was 2,469 KM in 2011 prices according to our data). This incidence of risk of poverty is higher than in any of the EU member states taken as comparators though less so with respect to the poorest new EU Member States (see Figure 2). The risk of poverty is only 5 percentage points more than Bulgaria and Romania, and 9 percentage points more than the average share for the new member states (18 percent).
Within BiH, the share of population at-risk-of-poverty is higher in RS (28 percent) than FBiH (26 percent) and on average higher in rural (33 percent) than in urban (17 percent) areas (Table 1). The risk of poverty is also higher among those living in households with heads 50 or older, and in male headed households.

Table 1: Share of population at-risk-of-poverty, by Entity and area of residence

<table>
<thead>
<tr>
<th>Entity</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Country</td>
<td>26.50</td>
<td>0.42</td>
<td>25.68</td>
</tr>
<tr>
<td>FBiH</td>
<td>25.89</td>
<td>0.52</td>
<td>24.88</td>
</tr>
<tr>
<td>RS</td>
<td>28.11</td>
<td>0.75</td>
<td>26.64</td>
</tr>
<tr>
<td>Area of residence</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>32.89</td>
<td>0.56</td>
<td>31.79</td>
</tr>
<tr>
<td>Urban</td>
<td>17.29</td>
<td>0.60</td>
<td>16.11</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset for Bosnia and Herzegovina; FYR Macedonia Statistical office and Eurostat, indicator ilc_peps, for all other countries and countries aggregates.

3.2 Material deprivation profile

The material deprivation rate is an indicator defined in relation to the inability to afford some of the items considered by most people to be desirable or even necessary to lead an adequate life:\footnote{A revised list of material deprivation variables has been devised after the EHBS 2011 was collected.}

1. to pay their rent, mortgage or utility bills;
2. to keep their home adequately warm;
3. to face unexpected expenses;
4. to eat meat or proteins regularly;
5. to go on holiday;
6. to travel on holiday or a summer holiday.

Source: World Bank staff estimates based on BIH 2011 HBS dataset. \footnote{A revised list of material deprivation variables has been devised after the EHBS 2011 was collected.}
6. a television set;
7. a washing machine;
8. a car;
9. a telephone.

The indicator distinguishes between individuals who cannot afford a certain good or service, and those who do not have this good or service for another reason, e.g. because they do not want or do not need it. Unfortunately, information about the desirability of specific items is missing in the dataset. This note adopts a stronger definition, assuming that the reason why individuals do not own an item is because they cannot afford it, which is in line with anecdotal evidence. This does not exclude, however, that the figures reported on material deprivation might be overestimated.

Table 2 shows the share of population that cannot afford each item. To go on holiday is the most widespread dimension of deprivation, as 74 percent of individuals cannot afford to go for a week away from home. The second largest source of material deprivation is facing unexpected expenses (64 percent of individuals) followed by having a car (36 percent) and to pay rent, mortgage or utility bills (30 percent). Only 1 percent of the population do not have a television, and only 2 percent do not have a telephone. On average, for each dimension, the incidence of material deprivation is higher in rural than urban area of residences, with the exception of to keep home adequately warm and to pay rent, mortgage or utility bills, which seem to be more frequent in urban areas. Republika Srpska has a higher incidence of individuals in material deprivation for all dimensions under consideration.

Table 2: Dimensions of material deprivation, by Entity and area of residence, population share (%)

<table>
<thead>
<tr>
<th>Item</th>
<th>FBiH</th>
<th>RS</th>
<th>Overall Population</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rural</td>
<td>Urban</td>
<td>Total</td>
</tr>
<tr>
<td>Rent, mortgage or utility bills</td>
<td>17.91</td>
<td>20.05</td>
<td>18.82</td>
</tr>
<tr>
<td>Unexpected expenses</td>
<td>62.63</td>
<td>57.50</td>
<td>60.45</td>
</tr>
<tr>
<td>Meat or proteins regularly</td>
<td>27.58</td>
<td>20.15</td>
<td>24.42</td>
</tr>
<tr>
<td>To go on holiday</td>
<td>79.87</td>
<td>59.44</td>
<td>71.19</td>
</tr>
<tr>
<td>A television set</td>
<td>0.56</td>
<td>0.89</td>
<td>0.70</td>
</tr>
<tr>
<td>A washing machine</td>
<td>5.58</td>
<td>2.69</td>
<td>4.35</td>
</tr>
<tr>
<td>A car</td>
<td>33.36</td>
<td>36.47</td>
<td>34.68</td>
</tr>
<tr>
<td>A telephone</td>
<td>2.62</td>
<td>0.90</td>
<td>1.89</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS database

Severe material deprivation (SMD, the indicator that contributes to the definition of AROPE) is defined as the enforced inability to pay for at least four of the above-mentioned items. In the whole country (see Table 3), 27 percent of population is severely materially deprived.

This level of severe material deprivation places Bosnia and Herzegovina on a par with some of the EU MS with the highest incidence (see Figure 3), right after Bulgaria (44 percent), Latvia (31 percent) and Romania (29 percent). The incidence of severe material deprivation in BiH is also well above the average for the new member states (EU12) which is 19 percent and 3 times higher than the incidence for the European Union as a whole (9 percent).

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6 Both a fixed phone or a mobile phone.
As summarized in Table 3, severe material deprivation is found more frequently in rural area (30 percent of individuals living in rural households) than in urban areas (24 percent of individuals). Moreover, there is a higher share of severe materially deprived individuals in RS (32 percent) than in FBiH (24 percent).

Table 3: Incidence of severe material deprivation, by Entity and area of residence

<table>
<thead>
<tr>
<th></th>
<th>Incidence (%)</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Country</strong></td>
<td>27.29</td>
<td>0.43</td>
<td>26.46</td>
</tr>
<tr>
<td><strong>Entity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>24.24</td>
<td>0.51</td>
<td>23.24</td>
</tr>
<tr>
<td>RS</td>
<td>32.15</td>
<td>0.78</td>
<td>30.62</td>
</tr>
<tr>
<td><strong>Area of residence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>29.55</td>
<td>0.54</td>
<td>28.49</td>
</tr>
<tr>
<td>Urban</td>
<td>24.04</td>
<td>0.68</td>
<td>22.71</td>
</tr>
</tbody>
</table>

Figure 4 provides details on the incidence of the different material deprivations by SMD status and for the overall population. Almost all individuals in SMD cannot afford a week away from home and cannot pay through their own resources an unexpected expense of 350 KM. Nevertheless, these two dimensions of deprivation are not confined to SMD individuals, as in the whole population 74 percent of individuals cannot afford to go on holiday and 64 percent of individuals cannot face unexpected expenses. Even among individuals living in household not in SMD, these two dimensions are accessible to less than half of the people. In the population as a whole, 36 percent of individuals cannot afford a car: among SMD individuals, 74 percent of individuals live in households not owning a car.
An alarming high share of SMD individuals, 73 percent, cannot afford to eat meat or proteins regularly (see Figure 4). As summarized in Table 4, those individuals account for 25 percent of the total population, and live mainly in rural areas (16 percent of the total population), and in FBiH (16 percent of the total population).

Table 4: Severe Materially Deprived individuals who cannot afford to eat meat or proteins regularly, share of overall BIH population (%)

<table>
<thead>
<tr>
<th></th>
<th>Rural</th>
<th>Urban</th>
<th>Overall Population</th>
</tr>
</thead>
<tbody>
<tr>
<td>FBiH</td>
<td>10.2</td>
<td>5.5</td>
<td>15.7</td>
</tr>
<tr>
<td>RS</td>
<td>5.8</td>
<td>3.1</td>
<td>8.9</td>
</tr>
<tr>
<td>Overall Population</td>
<td>16.3</td>
<td>8.9</td>
<td>25.2</td>
</tr>
</tbody>
</table>

Results from a simple linear probability model shows that the deprivation dimension which is more predictive of the status of SMD individual is to eat meat or proteins regularly, followed, in order of importance, by (ii) to pay rent, mortgage or utility bills, (iii) to keep home adequately warm, and (iv) having a car. The following correlation matrix (see Table 5) shows the statistical relationship among all material deprivation dimensions: again, to eat meat or proteins regularly has the highest correlation with severe material deprivation.
Table 5: Correlation matrix among severe material deprivation (md) and the different material deprivation dimensions

<table>
<thead>
<tr>
<th></th>
<th>md</th>
<th>md_1</th>
<th>md_2</th>
<th>md_3</th>
<th>md_4</th>
<th>md_5</th>
<th>md_6</th>
<th>md_7</th>
<th>md_8</th>
<th>md_9</th>
</tr>
</thead>
<tbody>
<tr>
<td>md</td>
<td>1</td>
<td>0.5496*</td>
<td>0.4057*</td>
<td>0.4413*</td>
<td>0.6771*</td>
<td>0.3628*</td>
<td>0.1190*</td>
<td>0.3395*</td>
<td>0.4847*</td>
<td>0.2370*</td>
</tr>
<tr>
<td>md_1</td>
<td></td>
<td>1</td>
<td>0.02047*</td>
<td>0.2715*</td>
<td>0.3512*</td>
<td>0.2554*</td>
<td>0.0556*</td>
<td>0.2181*</td>
<td>0.1430*</td>
<td>0.0678*</td>
</tr>
<tr>
<td>md_2</td>
<td></td>
<td></td>
<td>1</td>
<td>0.4057*</td>
<td>0.3679*</td>
<td>0.4843*</td>
<td>0.0678*</td>
<td>0.2181*</td>
<td>0.1339*</td>
<td>0.0397*</td>
</tr>
<tr>
<td>md_3</td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.4413*</td>
<td>0.3679*</td>
<td>0.2066*</td>
<td>0.4843*</td>
<td>0.0556*</td>
<td>0.0678*</td>
</tr>
<tr>
<td>md_4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.2047*</td>
<td>0.02047*</td>
<td>0.3512*</td>
<td>0.4843*</td>
<td>0.2181*</td>
</tr>
<tr>
<td>md_5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.2715*</td>
<td>0.0678*</td>
<td>0.2181*</td>
<td>0.0556*</td>
</tr>
<tr>
<td>md_6</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.0678*</td>
<td>0.2066*</td>
<td>0.4843*</td>
</tr>
<tr>
<td>md_7</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1</td>
<td>0.3512*</td>
<td>0.2066*</td>
</tr>
<tr>
<td>md_8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td>1</td>
<td>0.4413*</td>
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<td>md_9</td>
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<td></td>
<td></td>
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<td></td>
<td></td>
<td>1</td>
</tr>
</tbody>
</table>

Note: md_1 (to pay their rent, mortgage or utility); md_2 (to keep their home adequately warm); md_3 (to face unexpected expenses); md_4 (to eat meat or proteins regularly); md_5 (to go on holiday); md_6 (a television set); md_7 (a washing machine); md_8 (a car); md_9 (a telephone). Star (*) shows correlation coefficients significant at least at the 5% level.

3.3 Low work intensity profile
The indicator of low work intensity captures households who are disconnected from the labour market, seen as a key channel of participation in society. It is defined with reference to work intensity, i.e. the share of months that all working age household members (18-59, excluding students 18-24) could have worked that has been effectively worked. A low work intensity is identified with a work intensity lower than 20 percent.

Given the high levels of unemployment and very low level of activity, especially among women, registered in BiH (see Annex), this indicator can be expected to affect a significant share of the population. According to the EHBS 2011, in BiH 28 percent of individuals aged less than 60, or 685 thousands, live in households with very low work intensity (i.e. households where working age adults work less than 20 percent of their total available working time).

Such a high incidence of low work intensity puts BiH ahead of all EU member states from this profile. The highest EU MS with respect to this indicator is Ireland, with 24 percent, followed by Croatia with 15 percent (see Figure 55).
Figure 5: Share of individuals living in households with very low work intensity (population aged 0 to 59 years), 2011

Source: World Bank staff estimates based on BIH 2011 HBS dataset for Bosnia and Herzegovina; FYR Macedonia Statistical Office and Eurostat, indicator ilc_lvhl, for all other countries and countries aggregates.

Low work intensity is more frequent for people living in RS (32 percent) than people living in FBiH (26 percent) and it is higher in rural (30 percent) than in urban areas (26 percent), as summarized in Table 6. In addition, older individuals are more likely to live in households with very low work intensity. The incidence is also much higher in female-headed households (41 percent) than male-headed households (26 percent), and among single person households. The incidence of this deprivation decreases with more household members, reaching a minimum of 20 percent for 4 member households, but increases again for larger households (Annex).

Table 6: Share of individuals living in households with very low work intensity (population aged 0 to 59 years), by Entity and area of residence, 2011.

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Country</td>
<td>28.1</td>
<td>0.5</td>
<td>27.2</td>
</tr>
<tr>
<td><strong>Entity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>26.0</td>
<td>0.6</td>
<td>24.9</td>
</tr>
<tr>
<td>RS</td>
<td>32.1</td>
<td>0.9</td>
<td>30.3</td>
</tr>
<tr>
<td><strong>Area of residence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>29.9</td>
<td>0.6</td>
<td>28.6</td>
</tr>
<tr>
<td>Urban</td>
<td>25.6</td>
<td>0.8</td>
<td>24.0</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

The incidence of low-work intensity is inversely proportional to the level of education of the household head: 61 percent of individuals living in households where the head has no education are in a condition of very low work intensity, as opposed to 37 percent for those whose household head has primary education and 24 percent in case of secondary education. Very low work intensity status

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7 Single member households over 60 are excluded from the analysis, so these singles living alone and excluded from the labour market cannot be equated with pensioners.
has the minimum incidence in households where the head has attained tertiary education (see Table 7).

Table 7: Share of individuals living in households with very low work intensity (population aged 0 to 59 years), by highest level of education of the household head, 2011

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% Conf. Interval</th>
<th>Pop. Freq.</th>
<th>Population Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>No education</td>
<td>60.77</td>
<td>2.60</td>
<td>55.67 - 65.86</td>
<td>174,226</td>
<td>5.55</td>
</tr>
<tr>
<td>Primary education</td>
<td>37.07</td>
<td>1.02</td>
<td>35.07 - 39.07</td>
<td>889,802</td>
<td>28.36</td>
</tr>
<tr>
<td>Secondary education</td>
<td>24.18</td>
<td>0.61</td>
<td>22.99 - 25.38</td>
<td>1,667,994</td>
<td>53.17</td>
</tr>
<tr>
<td>Tertiary education</td>
<td>18.29</td>
<td>1.21</td>
<td>15.91 - 20.67</td>
<td>405,292</td>
<td>12.92</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

The highest frequency of very low work intensity is found in households where the household head is either a housewife (55 percent), unemployed (54 percent), disabled to work (51 percent) or retired (46 percent). The lowest share of households with very low work intensity is among the ones headed by employed individuals (13 percent).

Table 8: Share of individuals living in households with very low work intensity (population aged 0 to 59 years), by labor force status of the household’s head, 2011

<table>
<thead>
<tr>
<th>Labor Force Status</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>95% Conf. Interval</th>
<th>Pop. Freq.</th>
<th>Population Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employed</td>
<td>13.95</td>
<td>0.48</td>
<td>13.02 - 14.88</td>
<td>1,605,429</td>
<td>51.17</td>
</tr>
<tr>
<td>Unemployed</td>
<td>53.97</td>
<td>1.60</td>
<td>50.84 - 57.10</td>
<td>304,308</td>
<td>9.70</td>
</tr>
<tr>
<td>Retired</td>
<td>46.35</td>
<td>1.26</td>
<td>43.89 - 48.81</td>
<td>885,667</td>
<td>28.23</td>
</tr>
<tr>
<td>Disabled to work</td>
<td>50.51</td>
<td>3.71</td>
<td>43.24 - 57.79</td>
<td>83,535</td>
<td>2.66</td>
</tr>
<tr>
<td>Housewives</td>
<td>55.22</td>
<td>2.17</td>
<td>50.97 - 59.48</td>
<td>234,994</td>
<td>7.49</td>
</tr>
<tr>
<td>Others (inactive)</td>
<td>62.82</td>
<td>6.33</td>
<td>50.40 - 75.23</td>
<td>23,381</td>
<td>0.75</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

Restricting the sample to individuals living in households receiving some public transfer (excluding social security), 39.7 percent live in households with very low work intensity.

3.4 Interaction between the three indicators

The AROPE indicator adopted by the EU as a target for its 2020 strategy is defined as the union of these three indicators (at-risk-of-poverty, severe material deprivation and low work intensity). In this section we also look briefly at the intersection of the 3 indicators, as arguably this group represents a particularly vulnerable one. It should be noted, however, that the intersection of AROP, SMD and LWI is not relative to the entire population of the country, as it excludes de facto the elderly (LWI refers to the population in the 0-59 age group), and people who are working. Both populations can experience severe hardship. To account for this, we also consider consistent poverty (or intersection of SMD and AROP) as a measure of a more severe form of hardship.

3.4.1 At-risk-of-poverty-or-social-exclusion

The At Risk Of Poverty or Social Exclusion (AROPE) indicator for BiH, obtained by considering individuals who are deprived in at least one of the three basic dimensions identifies almost half of the overall population (48.1 percent) of the country, a share comparable to Bulgaria’s among EU MS.

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8 Monitoring the intersection as well as the union of the three indicators also helps addressing one of the criticisms raised against AROPE, namely that it pays no attention to the “depth of deprivation” due to cumulative disadvantages (a population characterized by a 20 percent incidence of each deprivation, and nobody deprived in more than one deprivation, appears worse off than one in which 20 percent of the population is deprived in all three dimensions, while arguably the challenges faced by this group are starker).
This is higher than the average AROPE share among new member states (31 percent) and twice the average for all 28 European countries (24 percent, see Figure 6).

Figure 6: Share of individuals at-risk-of-poverty-or-social-exclusion, 2011

Source: World Bank staff estimates based on BIH 2011 HBS dataset for Bosnia and Herzegovina and Eurostat, indicator ilc_peps, for all other countries and countries aggregates.

The incidence of at-risk-of-poverty-or-social-exclusion status is 9 percentage points higher in Republika Srpska (53 percent) than in the Federation of Bosnia and Herzegovina (46 percent), and it is higher in rural (54 percent) than urban areas (40 percent).

Table 9: Share of individuals at-risk-of-poverty-or-social-exclusion, by Entity and area of residence, 2011

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Country</strong></td>
<td>48.1</td>
<td>0.5</td>
<td>47.2</td>
</tr>
<tr>
<td><strong>Entity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>45.6</td>
<td>0.6</td>
<td>44.5</td>
</tr>
<tr>
<td>RS</td>
<td>52.6</td>
<td>0.8</td>
<td>51.0</td>
</tr>
<tr>
<td><strong>Area of residence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>53.9</td>
<td>0.6</td>
<td>52.8</td>
</tr>
<tr>
<td>Urban</td>
<td>39.8</td>
<td>0.8</td>
<td>38.3</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

An analysis of AROPE’s incidence by main source of income in the households finds that the lowest incidence (29 percent) is among those who are dependent from labour income, which represent 60 percent of the population. This group scores lowest in terms of work intensity and material deprivation, and second lowest (after the tiny group that declares to depend from income from land or property) in terms of risk of poverty. This group reports a lower incidence of AROPE in the FbiH than in the RS, driven by lower incidence of all deprivations. Households depending mostly from social assistance report an AROPE of 85 percent, driven by a very high incidence of low work intensity (Annex). Again, the incidence of AROPE in this group is lower in the FbiH than in the RS, driven by a much lower incidence of the risk of poverty.
3.4.2 Intersection between deprivation’s dimension

The indicator for being at risk of poverty is more closely associated with the other two, than those are with each other. As summarized in Figure 7, one every seven individuals (12 percent or 367,963 individuals) is both at-risk-of-poverty and living in household with very low work intensity. One every eight individuals (13 percent or 400,078 individuals) is both at-risk-of-poverty and severely materially deprived. One every eleven (9 percent or 288,863 individuals) live in households with both low work intensity and severe material deprivation.

Figure 7: Individuals at-risk-of-poverty-or-social-exclusion, by dimension, 2011

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
Note: Percentages indicate share of total

The overlap between the different dimensions of deprivation registered in BiH (6.2 percent) is greater than those found in EU MS (see Figure 8). The highest incidences among MS are registered in Bulgaria (5.8 percent), and Latvia (4.6 percent). On average, 2.3 percent of the population in the New Member States and 1.7 percent in the European Community are in the same condition.

Figure 8: Population at risk of poverty, severely materially deprived and living in a household with low work intensity, 2011

Source: World Bank staff estimates based on BIH 2011 HBS dataset for Bosnia and Herzegovina and Eurostat, indicator ilc_peps01, for all other countries and countries aggregates.
The share of population falling into the intersection of the three dimensions is 1.5 percentage points higher in RS (7.1 percent) than in FBiH (5.6 percent), and 1.4 percentage points higher in rural (6.8 percent) than in urban areas (5.4 percent).\(^9\)

Table 10: Population at risk of poverty, severely materially deprived and living in a household with low work intensity, by Entity and area of residence, 2011

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Country</strong></td>
<td>6.2</td>
<td>0.2</td>
<td>5.8</td>
</tr>
<tr>
<td><strong>Entity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>5.6</td>
<td>0.3</td>
<td>5.0</td>
</tr>
<tr>
<td>RS</td>
<td>7.1</td>
<td>0.4</td>
<td>6.3</td>
</tr>
<tr>
<td><strong>Area of residence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>6.8</td>
<td>0.3</td>
<td>6.2</td>
</tr>
<tr>
<td>Urban</td>
<td>5.4</td>
<td>0.4</td>
<td>4.7</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

As noted above, the estimates in Figure 8 and Table 11 exclude the elderly, because of the way the LWI indicator is constructed. Figure 9 and Table 11 presents estimates of consistent poverty, defined as the intersection of AROP and SMD indicators. As with the intersection of AROP, SMD and LWI, the share of population in consistent poverty in BiH is quite high by EU standards, although it is lower than in Bulgaria and Romania, mainly on account of larger shares of population in SMD in those countries.

Figure 9: Population at risk of poverty and severely materially deprived, 2011

Source: World Bank staff estimates based on BIH 2011 HBS dataset for Bosnia and Herzegovina and Eurostat, derived from the indicator ilc_pees01 as a sum of AROP+SMD+LWI and AROP+SMD+Not_LWI, for all other countries and countries aggregates.

The share of population falling into consistent poverty is almost 6 percentage points higher in RS than in FBiH, and 7 percentage points higher in rural areas, both differences being statistically significant at the 5 percent level. The differences in the incidence of consistent poverty across entities, and across urban/rural areas appear to be more pronounced that in the case of the overlap of all three

\(^9\) Both differences are statistically significant at the 5% level.
indicators presented above. This is primarily on account of large differences in AROP rates between urban and rural areas, and of SMD between FBiH and RS.

Table 11: Population at risk of poverty and severely materially deprived, by Entity and area of residence, 2011

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Overall Country</strong></td>
<td>12.8</td>
<td>0.3</td>
<td>12.1</td>
</tr>
<tr>
<td><strong>Entity</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>10.8</td>
<td>0.4</td>
<td>10.1</td>
</tr>
<tr>
<td>RS</td>
<td>16.3</td>
<td>0.6</td>
<td>15.1</td>
</tr>
<tr>
<td><strong>Area of residence</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>15.6</td>
<td>0.4</td>
<td>14.7</td>
</tr>
<tr>
<td>Urban</td>
<td>8.7</td>
<td>0.4</td>
<td>7.8</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BiH 2011 HBS dataset.

4 Social exclusion and Absolute Consumption Poverty

The official national poverty figures published by the statistical agencies in BiH are typically based on a consumption indicator with either an absolute or a relative poverty line. The measure of individuals at risk of poverty presented in this paper is a relative measure based on income, following the Eurostat guidelines. As the EHBS offers an opportunity to look at this indicator for the first time, it is useful to contrast it with other existing indicators of poverty, to understand if and how those measures differ. In this note we focus on the contrast between the absolute consumption measure calculated by the World Bank and the measures of social exclusion.

A major difference between these two measures is the scale of deprivation that these two measures identify. While 15 percent the population is deemed not to be able cover appropriately its basic needs, according to the World Bank methodology, almost 50 percent is considered at risk of poverty and social exclusion.

AROPE and its individual components, however, are quite correlated with the measure of absolute poverty, and tend to be much higher for those at the bottom of the distribution. More than eighty percent of individuals in the first decile of the consumption distribution are also at-risk-of-poverty-or-social-exclusion. But clearly these two measures do not encompass exactly the same aspects of deprivation, as even for the richest deciles, the AROPE indicator is around 30 percent (see Table 12).

Table 12: At-risk-of-poverty-or-social-exclusion, by quintiles of expenditure and poverty status

<table>
<thead>
<tr>
<th>Decile</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>80.33</td>
<td>1.18</td>
<td>78.01</td>
</tr>
<tr>
<td>2</td>
<td>72.67</td>
<td>1.32</td>
<td>70.08</td>
</tr>
<tr>
<td>3</td>
<td>54.80</td>
<td>1.49</td>
<td>51.87</td>
</tr>
<tr>
<td>4</td>
<td>50.84</td>
<td>1.52</td>
<td>47.87</td>
</tr>
<tr>
<td>5</td>
<td>48.93</td>
<td>1.50</td>
<td>45.98</td>
</tr>
<tr>
<td>6</td>
<td>46.61</td>
<td>1.49</td>
<td>43.69</td>
</tr>
<tr>
<td>7</td>
<td>35.06</td>
<td>1.44</td>
<td>32.25</td>
</tr>
<tr>
<td>8</td>
<td>35.10</td>
<td>1.44</td>
<td>32.28</td>
</tr>
<tr>
<td>9</td>
<td>30.70</td>
<td>1.40</td>
<td>27.95</td>
</tr>
<tr>
<td>10</td>
<td>26.26</td>
<td>1.36</td>
<td>23.59</td>
</tr>
</tbody>
</table>

Poverty
Despite the fact that consumption and income, as measured by the survey are quite different (see BOX 2 above) both consumption poverty and the risk of poverty indicator which is based on income data are closely correlated. The share of individuals at-risk-of-poverty decreases for higher levels of household total per capita expenditure: 60 percent of individuals in the first decile is at-risk-of-poverty, as opposed to 10 percent in the top decile. Similarly, a large share of those in consumption poverty (58 percent) is also classified at risk of poverty\(^{10}\) (Table 13).

Table 13: At-risk-of-poverty, by deciles of expenditure and poverty status

<table>
<thead>
<tr>
<th>Decile</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>59.42</td>
<td>1.47</td>
<td>56.54</td>
</tr>
<tr>
<td>2</td>
<td>46.42</td>
<td>1.48</td>
<td>43.52</td>
</tr>
<tr>
<td>3</td>
<td>33.38</td>
<td>1.41</td>
<td>30.61</td>
</tr>
<tr>
<td>4</td>
<td>24.99</td>
<td>1.31</td>
<td>22.43</td>
</tr>
<tr>
<td>5</td>
<td>22.51</td>
<td>1.24</td>
<td>20.07</td>
</tr>
<tr>
<td>6</td>
<td>24.72</td>
<td>1.29</td>
<td>22.20</td>
</tr>
<tr>
<td>7</td>
<td>15.50</td>
<td>1.08</td>
<td>13.38</td>
</tr>
<tr>
<td>8</td>
<td>15.48</td>
<td>1.08</td>
<td>13.36</td>
</tr>
<tr>
<td>9</td>
<td>12.96</td>
<td>1.01</td>
<td>10.98</td>
</tr>
<tr>
<td>10</td>
<td>9.47</td>
<td>0.90</td>
<td>7.71</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poverty</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>57.52</td>
<td>1.22</td>
<td>55.12</td>
</tr>
<tr>
<td>non poor</td>
<td>21.20</td>
<td>0.42</td>
<td>20.38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Overall Population</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>26.50</td>
<td>0.42</td>
<td>25.68</td>
<td>27.32</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

Also severe material deprivation is inversely correlated to household consumption per capita, and particularly prevalent among individuals in the first decile (64 percent). Moving from the first to the second decile the incidence of severe material deprivation decreases by 20 percentage points, and then it decreases until it reaches 8 percent among individuals in the top decile. The share of poor individuals affected by severe material deprivation is 60 percent, as opposed to 22 percent of non-poor individuals (see Table 14).

Table 14: Severe material deprivation, by quintiles of expenditure and poverty status

<table>
<thead>
<tr>
<th>Decile</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>63.35</td>
<td>1.43</td>
<td>60.54</td>
</tr>
<tr>
<td>2</td>
<td>44.02</td>
<td>1.47</td>
<td>41.13</td>
</tr>
<tr>
<td>3</td>
<td>28.28</td>
<td>1.36</td>
<td>25.61</td>
</tr>
<tr>
<td>4</td>
<td>30.22</td>
<td>1.40</td>
<td>27.48</td>
</tr>
</tbody>
</table>

\(^{10}\) The poverty line of 205KM per month falls between the first and the second deciles of the household per capita consumption distribution
Finally, also the incidence of very low work intensity is highest for the poorest two deciles (45 percent and 40 percent). It decreases to 25-30 percent for deciles three to six, and then to around 20 percent for the richest four deciles. Poor individuals are twenty percentage points more likely to live in a low work intensity household than non-poor individuals (44 percent as opposed to 25 percent).

### Table 15: Very low work intensity, by quintiles of expenditure and poverty status

<table>
<thead>
<tr>
<th>Decile</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>44.70</td>
<td>1.61</td>
<td>41.54</td>
</tr>
<tr>
<td>2</td>
<td>40.35</td>
<td>1.59</td>
<td>37.24</td>
</tr>
<tr>
<td>3</td>
<td>29.99</td>
<td>1.57</td>
<td>26.91</td>
</tr>
<tr>
<td>4</td>
<td>30.22</td>
<td>1.61</td>
<td>27.07</td>
</tr>
<tr>
<td>5</td>
<td>27.70</td>
<td>1.52</td>
<td>24.71</td>
</tr>
<tr>
<td>6</td>
<td>24.73</td>
<td>1.47</td>
<td>21.85</td>
</tr>
<tr>
<td>7</td>
<td>19.96</td>
<td>1.36</td>
<td>17.30</td>
</tr>
<tr>
<td>8</td>
<td>21.13</td>
<td>1.41</td>
<td>18.38</td>
</tr>
<tr>
<td>9</td>
<td>17.02</td>
<td>1.32</td>
<td>14.44</td>
</tr>
<tr>
<td>10</td>
<td>21.19</td>
<td>1.49</td>
<td>18.27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Poverty</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poor</td>
<td>43.82</td>
<td>1.33</td>
<td>41.21</td>
</tr>
<tr>
<td>non poor</td>
<td>25.11</td>
<td>0.51</td>
<td>24.11</td>
</tr>
</tbody>
</table>

### Overall Population

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall</td>
<td>28.1</td>
<td>0.5</td>
<td>27.2</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BiH 2011 HBS dataset.
Note: An individual is defined as poor if her total per-capita household consumption is below 205 KM per month (2007 prices).

## 5 Additional dimensions of social exclusion

The SILC survey and the additional modules collected in the EHBS provide information on additional dimensions of wellbeing that have become increasingly more visible in policy debates, such as subjective assessments of life satisfaction and health.

### 5.1 Life Satisfaction

The survey collects information on individuals satisfaction on different spheres of their life and on life overall. In BiH 10 percent of individuals (age 15 or more) report to be somehow or very unsatisfied with life in general. The area of life on which they report to be most unsatisfied is their own school experience: 13 percent of individuals (age 15 or more) report a certain level of
dissatisfaction with their own school experience. On the other hand, less than 3 percent of individuals age 15 or more are somehow or very unsatisfied with their own family or friendships.

Data show an inverse relation between age and satisfaction with family, friends, oneself, and life in general. Only 8 percent of the youngest cohort (age 15-24) as opposed to 13 percent in the oldest (age 65 and more) are somehow or very unsatisfied with life in general (Figure 10).

The data indirectly confirms the importance of the labour market not only as a means to sustain one’s livelihoods and as a way to participate in society, but also for individual’s life satisfaction. Those not working (retirees, unemployed and inactive) on average report the lowest levels of life satisfaction, while on average, students are the most satisfied group (Figure 11).

Individuals at-risk-of-poverty-or-social-exclusion are less satisfied with their life than non-excluded individuals: 17 percent declare to be somewhat or very unsatisfied as opposed to 5 percent of non-excluded individuals. Severe material deprivation appears to influence the most the feeling of dissatisfaction, particularly with respect to satisfaction with life in general (see tables in the Annex).

### 5.2 Self-reported health status

We define health-deprived individuals who either report bad or very bad health status, or a long-standing illness or health problem or health problems that limit they everyday activity. More than 1 every four individuals (26 percent of the population) conforms to this definition.

Among this group, 59 percent is also at-risk-of-poverty-or-social-exclusion, and almost one-third (31 percent) of individuals at-risk-of poverty-or-social exclusion is also health-deprived (see Table 16).

#### Table 16: Relation between AROPE and Health-deprivation, 2011

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>At-risk-of-poverty-or-social-exclusion</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non health-deprived</td>
<td>44.59</td>
<td>1.27</td>
<td>42.11</td>
</tr>
<tr>
<td>health-deprived</td>
<td>58.59</td>
<td>1.32</td>
<td>55.99</td>
</tr>
<tr>
<td><strong>Health-deprived</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>non AROPE</td>
<td>20.23</td>
<td>0.70</td>
<td>18.86</td>
</tr>
<tr>
<td>AROPE</td>
<td>30.84</td>
<td>0.88</td>
<td>29.11</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
In line with the literature, reported health status worsens with age. Data show a jump in the share of individuals reporting bad health and long-standing illnesses moving from cohort 35-49 to 50-64 and from 50-64 to 65 plus, as Figure 12, Figure 13 and Figure 14 summarize. On average, data show one to two percentage points (statistically significant at 5 percent) higher incidence of bad health among women than men. When breaking down the results by age groups, this gender difference is found only in the two oldest cohorts (40-64 and 65 plus).

![Figure 12: Self-Reported health status (bad, very bad), 2011](image1)

![Figure 13: Long-standing illness or health problem, 2011](image2)

![Figure 14: health problem limits everyday activities, 2011](image3)

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

### 6 Groups at special risk of exclusion

This section focuses on two groups of policy interests on which the EHBS collects specific data. The first is Refugees and Internally Displaced People (RIDP), the second is children. For the latter, detailed and specific indicator were collected, following the experience of the 2007 SILC module specifically dedicated to the social exclusion of children.

#### 6.1 Inclusion and poverty for refugees and internally displaced persons

According to the EHBS, 5 percent of the population falls into this category (RIDP; 11 percent in the RS, and 2 percent in the Federation, Table 17). RIDP live mainly in Republika Serbska (76 percent as opposed to 24 percent in the Federation), where the share of refugees or internally displaced individuals reaches 15 percent in urban areas (Annex).

| Table 17: Distribution of Refugees and Internally Displaced Persons, 2011 |
|-----------------|-----------------|-----------------|
|                   | Mean | Std. Err. | [95% Conf. Interval] |
| Overall Country   | 5.00 | 0.15      | 4.71 | 5.29 |
| Entity            |      |          |     |      |
| FBiH              | 1.88 | 0.12      | 1.65 | 2.11 |
| RS                | 11.31| 0.37      | 10.58| 12.04|
| Area of residence |      |          |     |      |
| Rural             | 4.21 | 0.18      | 3.86 | 4.55 |
| Urban             | 6.15 | 0.26      | 5.64 | 6.66 |

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
Despite higher point estimates, the incidence of consumption poverty and at-risk-of-poverty-or-social-exclusion for refugees and internally displaced persons is not statistically different from the rest of the population’s (see Table 18).

Table 18: Refugees and internally displaced persons at-risk-of-poverty-or-social-exclusion, 2011

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Population</td>
<td>48.15</td>
<td>1.11</td>
<td>45.96</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50.33</td>
</tr>
<tr>
<td>non RIDP</td>
<td>48.44</td>
<td>1.12</td>
<td>46.23</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50.64</td>
</tr>
<tr>
<td>RIDP</td>
<td>42.83</td>
<td>4.08</td>
<td>34.83</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>50.84</td>
</tr>
<tr>
<td>FBiH</td>
<td>45.65</td>
<td>1.36</td>
<td>42.98</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>48.33</td>
</tr>
<tr>
<td>non RIDP</td>
<td>45.69</td>
<td>1.35</td>
<td>43.04</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>48.35</td>
</tr>
<tr>
<td>RIDP</td>
<td>43.70</td>
<td>7.77</td>
<td>28.44</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>58.96</td>
</tr>
<tr>
<td>RS</td>
<td>52.62</td>
<td>1.93</td>
<td>48.82</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>56.41</td>
</tr>
<tr>
<td>non RIDP</td>
<td>53.90</td>
<td>2.00</td>
<td>49.97</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>57.82</td>
</tr>
<tr>
<td>RIDP</td>
<td>42.66</td>
<td>4.82</td>
<td>33.19</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>52.13</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

6.2 Children’s material deprivation

Figure 15 summarizes the status of deprivation for children below 16, for each of the eleven indicators collected to measure material deprivation for this group. Notice that the questions distinguish between not being able to afford the item or the activity and not having it for other reasons. Arguably, however, irrespective of the reason why a child does not participate or benefit from a particular activity she is deprived of an experience which is developmentally important.

Figure 15: Children’s material deprivation, by indicators, population age 0-15, 2011

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

11 These indicators, divided in 4 groups include: Clothing: Does the child (children) have some new (not second-hand) clothes? Does the child (children) have two pairs of properly fitting shoes (including a pair of all-weather shoes)? 2. Food: Does the child (children) eat fresh fruit and vegetables once a day? Does the child (children) have three meals a day?; 3. Education: Does the child (children) have books at home suitable for their age? Does the child (children) have a suitable place to study or do homework? Does the child (children) participate in regular leisure activities (swimming, playing an instrument, youth organizations, etc.)?; 4. Leisure and social life: Does the child (children) participate in celebrations on special occasions (birthdays, name days, religious events, etc.)? Does the child (children) invite friends round to play and eat from time to time? Does the child (children) participate in school trips and school events that cost money? Is there outdoor space in the neighbourhood where children can play safely?
As shown in Figure 15 above, a third of children below 16 do not participate in regular leisure activities, 28 percent do not participate to school trips and events, 17 percent do not eat fresh fruit and vegetables regularly, and 2 percent do not have three regular meals per day.

The eleven indicators may be grouped into four dimensions of deprivation: food, clothing, education and leisure and social life. A child is defined deprived in one dimension if she is deprived in at least one indicator pertaining to that dimension. As Table 19 summarizes, 16 to 18 percent of children is food deprived, with no significant difference among Entities or areas. A higher share of children is deprived in in Republika Serpska than in Federation of Bosnia under the dimension clothing; but more children are deprived in Education and Leisure and social life in FBiH than in RS. Deprivation in education is higher in rural than in urban areas.

Table 19: Children's material deprivation, by dimension, Entity and Area of residence, population age 0-15, 2011

<table>
<thead>
<tr>
<th></th>
<th>Food</th>
<th>Clothing</th>
<th>Education</th>
<th>Leisure and social life</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall country</td>
<td>16.96</td>
<td>17.67</td>
<td>36.90</td>
<td>38.68</td>
</tr>
<tr>
<td></td>
<td>(0.85)</td>
<td>(0.86)</td>
<td>(1.09)</td>
<td>(1.10)</td>
</tr>
<tr>
<td>Entity</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FBiH</td>
<td>16.66</td>
<td>16.27</td>
<td>38.56</td>
<td>41.08</td>
</tr>
<tr>
<td></td>
<td>(1.03)</td>
<td>(1.02)</td>
<td>(1.35)</td>
<td>(1.36)</td>
</tr>
<tr>
<td>RS</td>
<td>17.91</td>
<td>20.67</td>
<td>33.70</td>
<td>33.46</td>
</tr>
<tr>
<td></td>
<td>(1.61)</td>
<td>(1.70)</td>
<td>(1.99)</td>
<td>(1.98)</td>
</tr>
<tr>
<td>Area of residence</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>17.83</td>
<td>18.34</td>
<td>39.42</td>
<td>38.24</td>
</tr>
<tr>
<td></td>
<td>(1.07)</td>
<td>(1.08)</td>
<td>(1.36)</td>
<td>(1.36)</td>
</tr>
<tr>
<td>Urban</td>
<td>15.65</td>
<td>16.65</td>
<td>33.10</td>
<td>39.35</td>
</tr>
<tr>
<td></td>
<td>(1.40)</td>
<td>(1.44)</td>
<td>(1.82)</td>
<td>(1.88)</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
Note: Standard errors in parenthesis.

Material deprivation for children is significantly related to living in a household at risk of poverty and exclusion. Defining child exclusion as living in a household experiencing at least one dimension of child deprivation, over half of Bosnian children under 16 can be considered excluded (53% ). As depicted in Figure 16, 31 percent of children are both child-excluded and living in a household at-risk-of-poverty-or-social-inclusion. Overall, almost seven out of ten children (69 percent) are either child-excluded or living in a household at-risk-of-poverty-or-social-inclusion.

Figure 16: Child (age 0-15) at-risk-of-poverty-or-social-exclusion and child-excluded

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
Conclusions

This note has presented an initial snapshot of poverty and social exclusion in BiH as provided by the EBHS 2011. We estimate that almost half of the country can be considered to be at risk of poverty and social exclusion: 27 percent is at risk of poverty, 27 percent lives in severe material deprivation, and 28 percent live in households with very low work intensity. 6 percent of households experience all three of these deprivations. According to all of these indicators, other than the incidence of severe material deprivation, BiH fares worse than EU Member States. Only in the case of Severe Material Deprivation few of the new EU Member States fare worst.

Both the overall AROPE and the individual deprivations are more pervasive in the RS than in the FBiH. Similarly, the individual deprivations tend to be more prevalent in rural areas and among older people. Interestingly, they seem to affect more strongly households that are also characterized as living in consumption poverty, but they affect a not irrelevant percentage of the non-poor as well.

Other dimensions of wellbeing captured by the EHBS have also been explored:

- Life satisfaction data show that 10 percent of individuals are somewhat or very dissatisfied with their life. Individuals at risk of poverty and exclusion are more likely to do so than their counterparts. Severe material deprivation appears closely correlated with life dissatisfaction, and so does not being active on the labour market.
- Self reported health data show that one quarter of the population reports to be in bad or very bad health. Almost one third of those deprived according to this indicator are also at risk of poverty and exclusion, while almost 60 percent of those at risk of poverty or social exclusion are also health deprived.

The EHBS has also allowed to give a closer look at the inclusion of two special groups, of policy interest for different reason:

- Refugees and IDP, which according to the survey represent 5 percent of the population, and mostly live in the RS and in urban areas. Encouragingly, their risk of poverty or social exclusion does not appear to be different than for the rest of the population.
- Children – child exclusion was defined as encompassing a different set of indicators than exclusion overall. Looking at the four dimensions which constitute child exclusion, those which show the highest incidences of deprivation are leisure and social life and education. Over 50 percent of children in BiH can be considered to be excluded in that they are deprived in at least one of these dimensions; 31 percent of children are excluded and in live in households at risk of poverty or social exclusion.
References


Annex

Table 20: Share of individuals at-risk-of-poverty, by age of the household head

<table>
<thead>
<tr>
<th>Age Cohort</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
<th>Frequency</th>
<th>Population Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15-34</td>
<td>20.9</td>
<td>1.4</td>
<td>18.2 - 23.7</td>
<td>233,269</td>
<td>7.44</td>
</tr>
<tr>
<td>35-49</td>
<td>25.0</td>
<td>0.7</td>
<td>23.6 - 26.4</td>
<td>1,030,196</td>
<td>32.84</td>
</tr>
<tr>
<td>50-64</td>
<td>27.7</td>
<td>0.7</td>
<td>26.3 - 29.0</td>
<td>1,174,823</td>
<td>37.45</td>
</tr>
<tr>
<td>65+</td>
<td>28.6</td>
<td>0.9</td>
<td>26.9 - 30.4</td>
<td>699,026</td>
<td>22.28</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset

Table 21: Share of individuals at-risk-of-poverty, by gender of the household head

<table>
<thead>
<tr>
<th>Gender of Household Head</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
<th>Frequency</th>
<th>Population Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male HH head</td>
<td>26.9</td>
<td>0.5</td>
<td>26.0 - 27.8</td>
<td>2,641,094</td>
<td>84.2</td>
</tr>
<tr>
<td>Female HH Head</td>
<td>24.2</td>
<td>1.0</td>
<td>22.2 - 26.2</td>
<td>496,220</td>
<td>15.8</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset

Table 22: Unemployment Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall Population</th>
<th>FBIH</th>
<th>RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>27.6</td>
<td>29.2</td>
<td>24.5</td>
</tr>
<tr>
<td>2012</td>
<td>28.0</td>
<td>29.4</td>
<td>25.6</td>
</tr>
<tr>
<td>2013</td>
<td>27.5</td>
<td>27.6</td>
<td>27.0</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>26.1</td>
<td>27.6</td>
<td>23.0</td>
</tr>
<tr>
<td>2012</td>
<td>26.4</td>
<td>27.7</td>
<td>23.8</td>
</tr>
<tr>
<td>2013</td>
<td>26.5</td>
<td>27.1</td>
<td>25.3</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>29.9</td>
<td>32.1</td>
<td>26.5</td>
</tr>
<tr>
<td>2012</td>
<td>30.7</td>
<td>32.2</td>
<td>28.2</td>
</tr>
<tr>
<td>2013</td>
<td>29.0</td>
<td>28.4</td>
<td>29.5</td>
</tr>
</tbody>
</table>


Table 23: Activity Rate

<table>
<thead>
<tr>
<th>Year</th>
<th>Overall Population</th>
<th>FBIH</th>
<th>RS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2011</td>
<td>44.0</td>
<td>42.1</td>
<td>47.8</td>
</tr>
<tr>
<td>2012</td>
<td>44.0</td>
<td>42.4</td>
<td>47.4</td>
</tr>
<tr>
<td>2013</td>
<td>43.6</td>
<td>41.8</td>
<td>47.4</td>
</tr>
<tr>
<td>Males</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>55.9</td>
<td>55.0</td>
<td>57.6</td>
</tr>
<tr>
<td>2012</td>
<td>56.4</td>
<td>55.9</td>
<td>57.8</td>
</tr>
<tr>
<td>2013</td>
<td>55.3</td>
<td>54.4</td>
<td>57.5</td>
</tr>
<tr>
<td>Females</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011</td>
<td>32.8</td>
<td>29.8</td>
<td>38.6</td>
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<tr>
<td>2012</td>
<td>32.6</td>
<td>29.9</td>
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</tr>
<tr>
<td>2013</td>
<td>32.5</td>
<td>29.8</td>
<td>37.8</td>
</tr>
</tbody>
</table>


Table 24: Share of individuals living in households with very low work intensity (population aged 0 to 59 years), by Age cohort, 2011

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-14</td>
<td>23.85</td>
<td>1.01</td>
<td>21.87 - 25.82</td>
<td>508,975</td>
<td>19.29</td>
</tr>
<tr>
<td>15-34</td>
<td>26.17</td>
<td>0.82</td>
<td>24.56 - 27.78</td>
<td>821,396</td>
<td>31.13</td>
</tr>
<tr>
<td>35-49</td>
<td>25.97</td>
<td>0.93</td>
<td>24.15 - 27.78</td>
<td>639,742</td>
<td>24.24</td>
</tr>
</tbody>
</table>
Table 25: Share of individuals living in households with very low work intensity (population aged 0 to 59 years), by gender of the household head, 2011

<table>
<thead>
<tr>
<th>Gender of Household Head</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
<th>Pop. Freq.</th>
<th>Population Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male HH Head</td>
<td>26.14</td>
<td>0.51</td>
<td>25.15 - 27.14</td>
<td>2,641,094</td>
<td>84.18</td>
</tr>
<tr>
<td>Female HH Head</td>
<td>41.05</td>
<td>1.49</td>
<td>38.13 - 43.98</td>
<td>496,220</td>
<td>15.82</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BiH 2011 HBS dataset.

Table 26: Share of households with very low work intensity, by number of household’s members, 2011

<table>
<thead>
<tr>
<th>Number of Household’s Members</th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
<th>HH Frequency</th>
<th>HH Share (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>One member</td>
<td>54.00</td>
<td>4.03</td>
<td>46.10 - 61.90</td>
<td>180,703</td>
<td>17.48</td>
</tr>
<tr>
<td>Two members</td>
<td>39.20</td>
<td>2.68</td>
<td>33.94 - 44.46</td>
<td>272,642</td>
<td>26.37</td>
</tr>
<tr>
<td>Three members</td>
<td>25.27</td>
<td>2.01</td>
<td>21.33 - 29.21</td>
<td>192,197</td>
<td>18.59</td>
</tr>
<tr>
<td>Four members</td>
<td>19.66</td>
<td>1.54</td>
<td>16.65 - 22.67</td>
<td>222,417</td>
<td>21.52</td>
</tr>
<tr>
<td>Five or more members</td>
<td>25.37</td>
<td>2.06</td>
<td>21.33 - 29.41</td>
<td>165,808</td>
<td>16.04</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BiH 2011 HBS dataset.

Note: Households made only by individuals age 60 or more or full-time students are excluded from the analysis.

Table 27: Share of individuals by most important household income source

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Overall Country</th>
<th>FBiH</th>
<th>RS</th>
<th>Rural</th>
<th>Urban</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>59.79</td>
<td>59.94</td>
<td>59.64</td>
<td>58.64</td>
<td>61.45</td>
</tr>
<tr>
<td>Income from land or property</td>
<td>0.37</td>
<td>0.4</td>
<td>0.34</td>
<td>0.19</td>
<td>0.63</td>
</tr>
<tr>
<td>Income from private transfers</td>
<td>2.60</td>
<td>2.87</td>
<td>2.08</td>
<td>3.14</td>
<td>1.81</td>
</tr>
<tr>
<td>Other Incomes</td>
<td>1.06</td>
<td>0.53</td>
<td>1.98</td>
<td>1.21</td>
<td>0.85</td>
</tr>
<tr>
<td>Pensions</td>
<td>24.90</td>
<td>24.91</td>
<td>25.01</td>
<td>25.85</td>
<td>23.53</td>
</tr>
<tr>
<td>Social Assistance</td>
<td>4.28</td>
<td>4.95</td>
<td>2.55</td>
<td>4.66</td>
<td>3.74</td>
</tr>
<tr>
<td>No Income</td>
<td>4.06</td>
<td>5.21</td>
<td>2.12</td>
<td>4.31</td>
<td>3.7</td>
</tr>
<tr>
<td>Missing</td>
<td>2.94</td>
<td>1.19</td>
<td>6.27</td>
<td>2.00</td>
<td>4.29</td>
</tr>
<tr>
<td>Total</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
<td>100.00</td>
</tr>
</tbody>
</table>

Frequencies: 3,137,314 | 2,016,681 | 1,055,289 | 1,851,828 | 1,285,486

Source: World Bank staff estimates based on BiH 2011 HBS dataset.

Table 28: Share of individuals by most important household income source, and at-risk-of-poverty or social exclusion, overall population

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Risk of Poverty</th>
<th>Severe Material Deprivation</th>
<th>Very Low Work Intensity</th>
<th>AROPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>15.1</td>
<td>19.1</td>
<td>6.9</td>
<td>28.6</td>
</tr>
<tr>
<td>Income from land or property</td>
<td>5.2</td>
<td>32.8</td>
<td>67.3</td>
<td>64.4</td>
</tr>
<tr>
<td>Income from private transfers</td>
<td>37.7</td>
<td>46.2</td>
<td>80.5</td>
<td>83.6</td>
</tr>
<tr>
<td>Other Incomes</td>
<td>67.9</td>
<td>63.5</td>
<td>85.0</td>
<td>91.8</td>
</tr>
<tr>
<td>Pensions</td>
<td>38.4</td>
<td>40.3</td>
<td>74.1</td>
<td>69.5</td>
</tr>
<tr>
<td>Social Assistance</td>
<td>49.6</td>
<td>54.8</td>
<td>81.6</td>
<td>86.0</td>
</tr>
<tr>
<td>No Income</td>
<td>100.0</td>
<td>15.8</td>
<td>57.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Missing</td>
<td>0.0</td>
<td>29.0</td>
<td>100.0</td>
<td>89.3</td>
</tr>
<tr>
<td>Total</td>
<td>26.5</td>
<td>27.3</td>
<td>28.1</td>
<td>48.1</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BiH 2011 HBS dataset.

Table 29: Share of individuals by most important household income source, and at-risk-of-poverty or social exclusion, overall population, FBiH

<table>
<thead>
<tr>
<th>Income Source</th>
<th>Risk of Poverty</th>
<th>Severe Material Deprivation</th>
<th>Very Low Work Intensity</th>
<th>AROPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>13.3</td>
<td>16.4</td>
<td>5.3</td>
<td>25.1</td>
</tr>
<tr>
<td>Income from land or property</td>
<td>0.0</td>
<td>35.9</td>
<td>75.9</td>
<td>74.3</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BiH 2011 HBS dataset.
| Income from private transfers | 34.9 | 41.2 | 86.5 | 86.7 |
| Other Incomes | 67.0 | 57.5 | 85.4 | 85.9 |
| Pensions | 36.7 | 37.2 | 70.6 | 67.7 |
| Income from Public Transfers | 44.0 | 48.8 | 80.6 | 84.1 |
| No Income | 100.0 | 13.2 | 52.2 | 100.0 |
| Missing | 0.0 | 33.1 | 100.0 | 92.8 |
| Total | 25.9 | 24.2 | 26.0 | 45.6 |

Source: World Bank staff estimates based on BIH 2011 HBS dataset.

**Table 30**: Share of individuals by most important household income source, and at-risk-of-poverty or social exclusion, overall population, RS

<table>
<thead>
<tr>
<th>Risk of Poverty</th>
<th>Severe Material Deprivation</th>
<th>Very Low Work Intensity</th>
<th>AROPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>18.9</td>
<td>23.3</td>
<td>10.0</td>
</tr>
<tr>
<td>Income from land or property</td>
<td>16.8</td>
<td>26.0</td>
<td>45.9</td>
</tr>
<tr>
<td>Income from private transfers</td>
<td>46.0</td>
<td>58.6</td>
<td>56.0</td>
</tr>
<tr>
<td>Other Incomes</td>
<td>71.8</td>
<td>70.1</td>
<td>87.8</td>
</tr>
<tr>
<td>Pensions</td>
<td>42.3</td>
<td>45.4</td>
<td>80.5</td>
</tr>
<tr>
<td>Income from Public Transfers</td>
<td>65.9</td>
<td>71.4</td>
<td>84.5</td>
</tr>
<tr>
<td>No Income</td>
<td>100.0</td>
<td>28.0</td>
<td>81.6</td>
</tr>
<tr>
<td>Missing</td>
<td>0.0</td>
<td>28.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>28.1</td>
<td>32.1</td>
<td>32.1</td>
</tr>
</tbody>
</table>

**Table 31**: Share of individuals by most important household income source, and at-risk-of-poverty or social exclusion, overall population, Urban Settlements

<table>
<thead>
<tr>
<th>Risk of Poverty</th>
<th>Severe Material Deprivation</th>
<th>Very Low Work Intensity</th>
<th>AROPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>6.7</td>
<td>14.7</td>
<td>3.6</td>
</tr>
<tr>
<td>Income from land or property</td>
<td>3.9</td>
<td>47.1</td>
<td>74.0</td>
</tr>
<tr>
<td>Income from private transfers</td>
<td>36.6</td>
<td>51.7</td>
<td>82.0</td>
</tr>
<tr>
<td>Other Incomes</td>
<td>75.4</td>
<td>68.6</td>
<td>90.4</td>
</tr>
<tr>
<td>Pensions</td>
<td>26.7</td>
<td>41.0</td>
<td>79.3</td>
</tr>
<tr>
<td>Income from Public Transfers</td>
<td>49.3</td>
<td>59.0</td>
<td>92.9</td>
</tr>
<tr>
<td>No Income</td>
<td>100.0</td>
<td>11.7</td>
<td>50.9</td>
</tr>
<tr>
<td>Missing</td>
<td>0.0</td>
<td>21.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>17.3</td>
<td>24.0</td>
<td>25.6</td>
</tr>
</tbody>
</table>

**Table 32**: Share of individuals by most important household income source, and at-risk-of-poverty or social exclusion, overall population, Rural Settlements

<table>
<thead>
<tr>
<th>Risk of Poverty</th>
<th>Severe Material Deprivation</th>
<th>Very Low Work Intensity</th>
<th>AROPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Employment Income</td>
<td>21.2</td>
<td>22.3</td>
<td>9.3</td>
</tr>
<tr>
<td>Income from land or property</td>
<td>8.3</td>
<td>0.0</td>
<td>54.3</td>
</tr>
<tr>
<td>Income from private transfers</td>
<td>38.1</td>
<td>44.0</td>
<td>79.9</td>
</tr>
<tr>
<td>Other Incomes</td>
<td>64.3</td>
<td>61.1</td>
<td>82.2</td>
</tr>
<tr>
<td>Pensions</td>
<td>45.9</td>
<td>39.9</td>
<td>71.6</td>
</tr>
<tr>
<td>Income from Public Transfers</td>
<td>49.8</td>
<td>52.4</td>
<td>74.2</td>
</tr>
<tr>
<td>No Income</td>
<td>100.0</td>
<td>18.2</td>
<td>61.4</td>
</tr>
<tr>
<td>Missing</td>
<td>0.0</td>
<td>40.2</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>32.9</td>
<td>29.6</td>
<td>29.9</td>
</tr>
</tbody>
</table>

**Table 33**: Share of individuals (age 15+) who are somewhat or very unsatisfied with family, friendship, themselves, overall life, by at-risk-of-poverty-or-social-exclusion status, 2011

<table>
<thead>
<tr>
<th>Family</th>
<th>Friends</th>
<th>School</th>
<th>Yourself</th>
<th>Life in general</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

30
<table>
<thead>
<tr>
<th></th>
<th>Family</th>
<th>Friends</th>
<th>School</th>
<th>Yourself</th>
<th>Life in general</th>
</tr>
</thead>
<tbody>
<tr>
<td>AROPE</td>
<td>4.20</td>
<td>3.34</td>
<td>16.70</td>
<td>7.78</td>
<td>16.47</td>
</tr>
<tr>
<td></td>
<td>(0.29)</td>
<td>(0.26)</td>
<td>(0.55)</td>
<td>(0.39)</td>
<td>(0.54)</td>
</tr>
<tr>
<td>non AROPE</td>
<td>1.40</td>
<td>1.55</td>
<td>9.82</td>
<td>2.65</td>
<td>5.27</td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(0.18)</td>
<td>(0.43)</td>
<td>(0.23)</td>
<td>(0.32)</td>
</tr>
<tr>
<td>Overall population</td>
<td>2.8</td>
<td>2.4</td>
<td>13.2</td>
<td>5.1</td>
<td>10.7</td>
</tr>
<tr>
<td></td>
<td>(0.17)</td>
<td>(0.16)</td>
<td>(0.35)</td>
<td>(0.23)</td>
<td>(0.32)</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.
Note: standard errors in parenthesis.

Table 34: Share of individuals (age 15+) who are somewhat or very unsatisfied with family, friendship, themselves, overall life, by dimension of social exclusion, 2011

Table 35: Share of Refugees and Internally Displaced Persons by Entity and area of residence, 2011

<table>
<thead>
<tr>
<th></th>
<th>Mean</th>
<th>Std. Err.</th>
<th>[95% Conf. Interval]</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>RS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>8.95</td>
<td>0.43</td>
<td>8.10</td>
</tr>
<tr>
<td>Urban</td>
<td>15.12</td>
<td>0.68</td>
<td>13.78</td>
</tr>
<tr>
<td><strong>FBiH</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>1.69</td>
<td>0.13</td>
<td>1.43</td>
</tr>
<tr>
<td>Urban</td>
<td>2.14</td>
<td>0.21</td>
<td>1.74</td>
</tr>
</tbody>
</table>

Source: World Bank staff estimates based on BIH 2011 HBS dataset.