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# Title page

# Inequality of opportunities and beliefs about economic outcomes in the Western Balkans

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All of us do not have equal talent, but all of us should have an equal opportunity to develop our talent.

John F. Kennedy

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#### **Abstract**

An egalitarian society is one that incentivises individuals to use their resources in order to be improve their economic outcomes and achieve social integration. The objective of this paper is to analyse Inequality of Opportunity (IOp), a measure of deprivation which counts for differences in economic outcomes, as well as estimate its effects. The research findings show that IOp is positively associated with statements on beliefs about the unfair distribution of outcomes in the sense of a successful life and towards the most important factors of finding a job at present. On the other hand, higher levels institutional trust reverse the effect of IOp. There are additional positive impacts in terms of such beliefs for those whose access to primary goods is limited due to disfavourable initial conditions at birth (being born in a rural area and being a female), who perceive themselves as belonging to a lower social class and those who have had positive experiences from their interaction with institutions. Findings are especially important in the context of countries with weak institutions and democracy, such as the case of Western Balkans (focus of this paper) and urge for a strengthening of institutions which regulate and support the citizens' integration into society.

Keywords: social exclusion, Western Balkans, Post-Communist, inequality of opportunities

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#### 1. Introduction

Inequality is a crucial element of social justice in developed economies and remains a very important issue of development. A prevailing part of the discourse on inequality across the world is related to the factors influencing certain outcomes of people's life. Indeed, as Aiyar and Ebeke (2020) emphasize, the distinction between the kinds of inequality, those that emerge ethically and morally acceptable or unacceptable, is perhaps the most important contribution of philosophical egalitarian thought during the last forty years.

More than two decades ago, Roemer (1993, 1998) brought into the philosophical debate the inequality of opportunity (IOp), defined as that part of overall inequality which arises from factors beyond the control of an individual (circumstances). Following this line of argument, the success of the individuals in the entire lifespan emerges as being on one hand determined by effort (which includes investment in human capital, hard work, performance, etc., - which are under the control of the individual) and on the other hand, circumstances, (namely demographic status and biological endowments - gender, being born in a rural/urban area, ethnicity, etc.) (Checchi and Peragine, 2010; Marrero & Rodríguez, 2012). The same is true for social endowments which stem from the socio-economic origin of individuals (most often indicated by parental occupational status, education, and/or income/wealth) (Breen and Jonsson, 2005). These uncontrolled conditions are mostly a matter of luck and their distribution is "morally arbitrary" (Rawls, 1971).

Investigating IOp is a continuing concern because it affects beliefs about economic outcomes. These are of particular interest to the academic and policy making community because they can have utility (proxied by life satisfaction) costs. Beliefs can also affect significant economic decisions (Brock, 2020) such as whether to participate in the voting process, invest in human capital, start a business, or emigrate. Thus, analysing IOp and its effects is even more important in the context of countries with weak institutions and democracy, as on one hand, such conditions may substantially influence (objective and perceived) IOp, and on the other hand, investment in human capacities and active participation (e.g. in voting) is crucial to catch up with more developed Western economies.

We have to distinguish between "objective" and "subjective/perceived" IOp, as the later, being linked to aspirations, is also influenced by various subjective factors. Individuals tend to accept more inequality in outcomes if it reflects effort for which individuals are responsible (Alesina et al., 2004; Fehr and Vollmann, 2020; Roemer and Trannoy, 2016). In this sense, the majority of people consider inequalities that arise from the application of

different levels of effort as less objectionable and fairer than those that are due, say, to luck such as having family members in high places or initial conditions at birth such as ethnic/gender discrimination. This gives effort the status of a legitimate source of inequality (Brock, 2020; Lefranc et al., 2009).

The scope of this study is to evaluate the adverse effects of IOp on beliefs about economic outcomes. In our study, the component of efforts is not included in IOp, rather, what is left except effort as these are more easily measured. Accordingly, IOp is estimated as the variance of a primary goods index (bundle) explained by the social origin of individuals and individual endowments at birth that are considered as factors over which the individual has no control. The study is based on the analyses of 2017 to 2021 waves of the Public Opinion Survey which is collected by the Regional Cooperation Council.

Post-communist contexts typically reflect perceptions of unfair inequality and favourable non-competitive segments of workers in the labour market and are characterized by a general lack of distributive justice (Checchi et al., 2016; Drishti et al., 2022; Efendic and Ledeneva, 2020; Guriev and Zhuravskaya, 2009). In these economies, IOp, along with corruption, has been identified as a key driver of societal support for future reformation (Douarin and Mickiewicz, 2022) therefore IOp plays also an instrumental role in terms of support for redistributive policies. Few economic analyses have tried to assess the extent to which equality of opportunity is empirically satisfied in the post-communist countries (e.g. Cojocaru, 2014). In order to capture this missing dimension, we have chosen to investigate on data collected from a representative sample from six less affluent post-communist Western Balkans countries (WB6), namely, Albania, Bosnia and Herzegovina, Kosovo, Montenegro, North Macedonia, and Serbia. In addition, the majority of research is limited to within country estimations, while cross-countries comparisons are less frequent in the literature, mainly because of data limitations (Breen and Jonsson, 2005; Checchi et al., 2016). To the best of our knowledge this is the first comparative analysis of opportunity inequality in WB6. We analyse five waves of standardized data collected for each of the WB6 countries and compare the countries with each other while controlling for year fixed effects.

The core hypothesis of this paper is that in post-communist societies, the unfair distribution of circumstances – i.e. the assets and premises of the household mainly generated by the parents' social status during the past, act as binding constraints on the today perceptions about economic outcomes such as success in the labour market and life in general.

The findings of the study, are of instrumental value, since they enable the understanding of similar economic and institutional mechanisms that generate existing income inequalities. Given the frequently superiority of IOp compared to simply measuring outcomes such as income inequality, this study represents a concrete action in understanding future perspectives of development. Finally, any identification of the role of exogenous circumstances as compared to the legitimate role of the applied level of efforts, would be a motivation for asserting astute redistributive policies.

The rest of the paper is organized as follows: The next section describes the theoretical background and empirical recent developments in measuring IOp on a cross-country comparable basis, and discusses the variables that we will use from this literature. Section 3 generates the paper's testable hypotheses. Section 4 describes the data and the two-step model specification. Section 5 reports our main results. Section 6 dwells briefly on some practical and policy implications of the results.

## 2. Theoretical and empirical background

## 2.1. Inequality of opportunity (IOp)

Modern theories of justice argue that differentials in economic outcomes are a desirable goal of public policy if they descend from morally or socially justified inequalities. This has led egalitarian philosophers such as Rawls (1971), Dworkin (1981a, 1981b), Sen (1985), Cohen (1989) or Arneson (1989, 1990) to claim that distributive justice does not entail the equality of individual outcomes but only requires that individuals face equal opportunities that would potentially enable them to achieve equal income outcome – potential being dependent on the level of effort and controllable factors. Thus, the effect of initial circumstances and social origins on economic outcomes is considered unfair and researchers argue that it should be compensated with equalizing primary-goods bundles across persons (or passing to an egalitarian distribution of primary goods for all individuals) (Rawls, 1971; Roemer and Trannoy, 2016). Primary goods are those inputs required for the success of any economic outcome in the life and work domains. Much of the related literature considers primary goods as an universal cultivation of a set of "capabilities" for various significant human "functionings" (Macleod, 2010; Nelson, 2008; Rawls, 1971). In this context, there has been a growing research interest in IOp in the recent years – many studies focus on IOp drivers and implications which are described below.

#### 2.2. Drivers of IOp

Indeed, to be able to judge inequality in economic outcomes as fair or unfair, we need to consider its drivers. Inequalities arising from different levels of effort are less objectionable than those due to gender, place of birth, family origin, etc., considered as exogenous circumstances related to initial conditions at birth or luck (Palmisano and Peragine, 2022). This is because effort is under the control of the individual and can be used to maximise economic outcomes, while the physical, biological, socio-economic conditions, and/or luck are not. Therefore, the social objective shifts towards the rationale that what matters for a just society is the distribution of opportunities, rather than the just distribution of outcomes (Nelson, 2008).

Classically, IOp is an income-based estimation. However, from a materialistic perspective, central to the concept of IOp is the notion of 'capabilities' (Nussbaum, 1997; Sen, 1999) which complies with Rawls (1971) idea of 'primary goods'. These are understood as the ability to engage in "the central elements of truly human functioning", derived straightforwardly from the idea of "a human worth or dignity" and which are "always rational to want them whatever else one wants" (Nelson, 2008). These capabilities "have a special importance in making any plan of life possible, and so they have a special claim to be supported for political purposes in a pluralistic society (ibid). In particular, it is always desirable for one to exercise control over the environment in a materialistic sense. For the life domain, this includes having property of, both, land and movable goods. For the work domain, this includes being able to seek and find employment on an equal basis with others. The lack of control above these primary goods/services results in the prevention of entire groups from participation into economic and social life (Checchi et al., 2016; Nelson, 2008).

There is a consensus among social scientists that the most relevant factors in explaining unfair IOp can be divided in two categories: (i) demographic and biological endowments (gender, region of birth rural/urban area, ethnicity, etc.) and (ii) social endowments which stem from the socio-economic origins of individuals (most often indicated by parental occupational status, education, and/or wealth). Previous studies that have investigated IOp have used similar factors demographic and biological factors such as race and region of birth in comparative evidence on IOp over six Latin-American countries (Ferreira and Gignoux, 2011) over 11 Sub-Saharan African countries (Brunori et al., 2019). Regarding social origins, Marrero and Rodríguez (2013) use parental education and occupation (separately taken for each parent), family economic conditions when young and country of origin, however they

do not take into account gender and age.

Empirical evidence documents the usage of different definitions for the outcome variable: disposable equivalent household income (Marrero and Rodriguez, 2012) or wealth asset called unfair inequality (Brock, 2020). In this study, we will use a weighted index for access to a bundle of primary goods related to material and lifestyle concerns.

Previous research on India has shown that IOp among women is influenced by origin and place of leaving (e.g. rural vs. urban) in addition to parents' education (Choudhary et al, 2019). Also in the case of Turkey (a country with which Albania shares strong historical and cultural links), previous studies have shown that whether a woman is born in an urban or rural area is strongly associated with her economic advantage as an adult (Ferreira et al, 2011). In Albania, the discrimination of women has been reported by several studies with special focus on rural areas (Zhllima et al, 2021, 2022). Thus, we expect that, being of rural origin and being women affects significantly IOp also in the case of Albania.

In Albania, rural population is disadvantaged, given the gaps existing in terms of infrastructure and services persisting during the central regime and later. Even after the land reform, the rural population make their living mostly based in a small-scale agriculture sector, which is mostly unprofitable and characterized by deteriorating returns (Zhllima et al, 2021a). About 86 percent of farms operate at semi-subsistence or subsistence level, with limited access to inputs, services and markets.

In addition, in Albania are witnessed trends of feminisation of the agriculture sector (Zhllima et al, 2021b). Women remain one of the most vulnerable groups of rural societies, who regardless of marital status — are the most overworked and marginalized, with the less orientation toward off-farm engagement, and with limited rights due to their existence in a masculinist society which lives upon large presence of customary mechanisms regulating legal property rights and other spheres of live (Zhllima et al, 2022). Women live under triple oppression, due to their gender, their location and the government neglect, despite the progress made in legal frameworks surrounding land ownership and inheritance. Their current situation influences also their perceptions and expectations about the future. Thus, according to Zhllima et al (2022) education, legal literacy and household circumstances, increases women's view on gender equality. In this context, the first group of hypothesis that we test, is that age, gender, origin (rural vs. urban), social status influence in (perceived IOp). The expectation is that, being young, female, rural resident (or of rural origin), and coming from lower socio-economic status are more likely to perceive high IOp.

#### 2.3. IOp effects on beliefs about unfair economic outcomes

Having experienced unfair IOp, negatively affects beliefs about the fairness of economic outcomes distribution (Brock, 2020; Cojocaru, 2014). In fact, Bourguignon et al. (2007) have documented that systematic inequalities in initial opportunities create a path-dependency in the form of inequality traps that have adverse effects in the future economic outcomes. People's beliefs about whether hard work, effort, performance and ambition are critical for economic success and generate morally or socially justified inequalities are a consequence of having experienced IOp due to initial conditions at birth or social origins. As established in the previous section, these are exogenous factors that are not controlled by the individual. However, these beliefs in (un)fair distribution of economic outcomes have an instrumental value towards redistributive policies. Indeed, knowing the origin of inequality in outcomes can influence economic decision-making and social attitudes about redistribution policies (Alesina and La Ferrara, 2005; Brock, 2020; Checchi et al., 2016; Eisenkopf et al., 2013; Durante et al., 2014; Gründler and Köllner, 2017). Recognition that smaller (vs. larger) shares of inequalities in present economic outcomes is due to IOp, might contribute towards the reduction (vs. proliferation) of support for redistributive policies.

IOp, rather than inequality in economic outcomes, can be related to aggregate economic performance: evidence suggests that strong and persistent IOp generate barriers to entire groups from participation into economic and social life and can generate true inequality traps (path dependency) that may result in severe constraints to perspectives of future growth of an economy (Bourguignon et al., 2007). Moreover, attributing poor personal economic outcomes to an unfair system affects the steady state effort, hard work, performance and ambition levels, that the majority of society believes as largely rewarded (Alesina et al., 2012). If people do not believe they can get rewarded for hard work and ability, there may be little incentive for people to "buy into the system", for example by investing in human capital (e.g. study hard) or building a business. This under-investment can in turn impact growth (Brock, 2020; Marrero and Rodríguez, 2013). In conclusion, beliefs about fairness of determinants of economic outcomes are valuable to study because they can impact consequential economic decisions (Brock, 2020).

#### 2.4. The moderating role of institutional trust

In post-communist contexts in general and in the WB6 in particular, the poor institutional quality and high corruption remain a major challenge. Corruption has negative effects on life satisfaction (Amini and Douarin, 2020) and is related to poor institutional trust. Corruption contributes to IOp, which is higher in transition countries than elsewhere (Douarin and Mickiewicz, 2022).

As mentioned above, while IOp can enter economies in inequality traps from which it is difficult to exit, better institutional quality/trust can absorb the adverse effects of inequality this way redirecting them towards fair growth paths (Douarin and Mickiewicz, 2022). Therefore, institutional quality/trust interacts with how people experience IOp (as a driver of beliefs about inequality in economic outcomes) in such fashion that it changes their perception of their experience (Bénabou and Tirole, 2006; Piketty, 1995).

Beliefs about determinants of inequality of economic outcomes may be influenced by the policies and institutions to which individuals are exposed during their life (Hunt, 1996; Alesina and Giuliano, 2015; Wildavsky, 1987). There are two possible underlying mechanism in which the interaction between IOp and institutional quality can influence beliefs about unfair economic outcomes. On one hand, direct personal exposure to institutional transactions can increase the information symmetry about institutional quality. This revelation will either support or weaken ones judgments that have been previously formed as a consequence of their own experiences with what determines successful economic outcomes (Bénabou and Tirole, 2011). Therefore, direct contact with institutions can interact with IOp experience to influence beliefs about determinants of fairness in economic outcomes. On the other, hand, in more affluent and regulated contexts, the existence of well-functioning formal institutions and rule of law in more affluent countries, can act like an insurance policy, such that the beliefs people hold about ex ante inequality will be influenced by their ex post ability to compensate for it, using the available formal institutions (Brock, 2020). Therefore, in countries with the same level of IOp, stronger institutions help to reverse its adverse effects because formal institutions provide a system which helps to reverse the inequalities at start.

# 3. Conceptual framework and hypotheses

Considering the literature review we can conceptualise the process of factors influencing IOp, which by extension affects the beliefs on economic outcomes as illustrated in Figure 1.

Uncontrolled / Luck Demographic endowment Ethnicity Unfair share (%) Inequality of Urban or rural place of birth Opportunity of Inequality Biological endowment Gender Socio-economic origins Parental occupation/education Parental income/wealth Parental Inequality of: Political/Power Beliefs about *unfair* Income Parental affiliation in political life and labour Health parties Primary goods market outcomes Controlled / Effort Hard work Human and social capital Fair share (%) of Intelligence Inequality Skills Performance

Figure 1: Conceptual framework of IOp

Source: Authors' own elaboration

Based on the review of factors influencing IOp which are illustrated in Figure 1, a set of testable hypotheses can be derived:

1) All other things being equal, specific subgroups of individuals will be particularly likely to report higher levels of inequality of opportunity (IOp): (i) Young people more likely than other age groups; women more likely than men; (iii) those born in rural areas; (iv) those whose social status is lower (vs. middle and higher); and (v) those who have unemployed familiars (as a signal for lower family social origin) will be more likely to report to report higher levels of IOp.

In addition, given the moderating role of institutional trust for beliefs about economic outcomes we expect that

2) All other things being equal, institutional trust (as a proxy of institutional quality) interacts with IOp in a way that beliefs about unfair (vs. fair) economic outcomes of

those more (vs. less) deprived from opportunities will be particularly amplified if their institutional trust is lower (vs. higher).

As mentioned earlier, IOp is expected to influence the individual beliefs about economic outcomes. This relation is reflected in the bottom part of the diagram. Thus:

3) All other things being equal, those with higher (vs. lower) levels of IOp will be more likely to report beliefs about unfair (vs. fair) economic outcomes.

Given the importance of institutional trust for beliefs about economic outcomes:

4) Institutional trust (as a proxy of institutional quality) interacts with IOp in a way that beliefs about unfair (vs. fair) economic outcomes of those more (vs. less) deprived from opportunities will be particularly amplified if their institutional trust is lower (vs. higher).

#### 4. Methods

#### 4.1. Data and analytical strategy

We use a unique and updated database, namely the Public Opinion, collected within the framework of the Balkan Barometer. This is an annual survey of in six Western Balkans economies (Albania, Bosnia and Herzegovina, Kosovo\*, Montenegro, North Macedonia and Serbia), commissioned by the Regional Cooperation Council (RCC)<sup>1</sup>. It examines the aspirations and expectations on life and work, prevalent socio-economic and political trends & regional and European integration. It is usually conducted in the beginning of each calendaric year (January to March), by an independent agency among more than 6,000 citizens throughout the WB region and represents a unique cross-sectional survey for the WB6, which allows cross-country comparisons. The time horizon for which beliefs about the fairness of economic outcomes are included in the questionnaire are from 2017 and 2021.

In line with previous literature, we propose a similar modelling strategy to account for employment and success in life beliefs, by including household access to a bundle of primary goods because the data source lacks reliable income data over time<sup>2</sup>. This measure captures

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<sup>&</sup>lt;sup>1</sup> https://www.rcc.int/balkanbarometer/results/2/public

<sup>&</sup>lt;sup>2</sup> Data is measured in income segments which are in local currency across the WB6 and cannot be standardized or unified as even within countries the segments change along the years.

the portion of overall inequality in access to household basic goods that can be attributed to individuals' initial circumstances and social origins. We estimate a two-stage least squares linear model of individual responses within each of the WB6 countries. In the first stage, we decompose inequality of access to primary goods based on IOp generated by a person's initial conditions (circumstances) at birth and social origin and a residual term as below:

$$IOp_i = \beta_1 Male_i + \beta_2 Rural_i + \beta_3 Parental\ Unemployment_i + \beta_4 Social Status_i + u_i$$

**Eq.** 1

Where parental unemployment is based on the reply to the answer of whether any of your parents has lost their job recently. Social status is measured through a (self-report) made to the question: How would you estimate your current socio-economic status?

We further estimate the effects of IOp on beliefs about unfair inequality in terms of life and labour market outcomes:

$$Belief_i = \beta_1 IOp_i + \beta_2 InsTrust_i + \beta_3 IOp \times InsTrust_i + \sum_{p=4}^P \beta_p X_{pi} + e_i$$
 Eq. 2

Based on the approach of (Brock, 2020), probit models for the outcome variables at the individual-level are used since the outcome variables are converted to binary variables. In the above equations, dependent variable "belief" are subjective estimations which reflect an individual *i*'s subjective belief about an economic outcome for the labour market in general or the public sector alone, and for what is necessary for getting ahead in life. More details on these measures and how they are operationalised in the present study can be found in the next section, along with the measures of first level dependent variable, IOp, and the moderating variable institutional trust (InsTrust). In addition, interaction effects of IOp and institutional trust are expected to influence beliefs.

The rest of the equation illustrates the P individual-level variables  $X_{pi}$ , control variables which consists in individual characteristics such as age, age square, gender, employment status, education, etc. At the individual level, IOp is the predicted estimation of model Eq.1.

In the context of this study, the sample of WB6 countries does not meet the criteria to estimate pooled cross-national comparison which are typical of a large set of countries. Therefore we are limited to within-country estimation which are comparable considering the standardized survey data across the WB6. Year fixed effects are included and standard errors are bootstrapped.

#### 4.2. Measures

### 4.2.1. Dependent variable: beliefs about economic outcomes

We estimate the effects on beliefs about unfair inequality in terms of economic outcomes, i.e. success in life and labour market and how they are affected by inequality of opportunities.

Firstly, regarding beliefs about labour market success in the public sector, two items are used: (i) In public sector, most people can succeed if they are willing to work hard, and (ii) Hard work is no guarantee of success in public sector as for most people it is more a matter of connections. The response scale is binary, 1 if 'disagree', 0 if 'agree'.

Second, in terms of beliefs about getting ahead in life, we use three items: (i) What do you think is the most important for getting ahead in life? Knowing the right people; (ii) What do you think is the most important for getting ahead in life? Being lucky; and (iii) What do you think is the most important for getting ahead in life? Belonging to a wealthy family, with response scale 1 if 'yes', 0 if 'no'.

Lastly, regarding beliefs about labour market success, we use two items: (i) In your opinion, which two assets are most important for finding a job today? Personal contacts, and (ii) In your opinion, which two assets are most important for finding a job today? Network of family and friends, with response scale 1 if 'yes', 0 if 'no'.

#### 4.3. Explanatory variables

#### *4.3.1. Variable of interest – inequality of opportunity (IOp)*

A number of different measurement and evaluation methodologies have been proposed to aggregate a set of primary goods into an index that would allow comparison in the subjective perceptions about endowment with capabilities or primary goods. In this study we disaggregate inequality in access/affordance of a bundle of primary goods into (i) IOp generated by a person's initial conditions – physical and demographic circumstances at birth and family origin and social status, and (ii) a residual term. This means that hard work, effort, and performance are encapsulated in the random factors and whose impact on economic outcomes should is fair and less opposed.

We identify IOp with primary goods inequalities – a proxy of the bundle of 'primary goods' – as the degree of the variance of children's' subjective evaluations about access/affordance of a group of items (primary goods) explained by parents' labour market

status (as a proxy for income and education), perceived social class (lower, middle, higher) and children's' initial conditions at birth (gender and region of birth, urban or rural). This bundle is a weighted index from principal component analysis (PCA) for participants' concerns about not being able to afford 1 'rent or utility bills', 2 'instalment on a loan', 3 'keeping home warm', 4 'food, clothed, and other basic supplies', 5 'affording at least 1 week of holidays'. The response scale 1 if 'yes', 0 if 'no'. The primary goods bundle index therefore measures a notion of opportunity deprivation that goes beyond basic needs, as it includes some items related to lifestyle.

#### 4.3.2. *Moderating variables – institutional trust*

To estimate the effects of IOp on beliefs about economic outcomes, we look at how changes in IOp are correlated with beliefs about the fairness of economic outcomes, and how this correlation varies by institutional quality. We measure institutional quality by a PCA weighted mean about a group of four items capturing subjective evaluations of the individuals' trust in certain institutions: 1 'Courts and judiciary', 2 'Parliament', 3 'Government', 4 'Ombudsman'. Response scale 1 if 'Totally distrust', 2 if 'Tend not to trust', 3 'Tend to trust', 4 'Totally trust'.

#### 4.3.3. Control variables

We controlled for participants' curvilinear effects of age (in years), gender, highest achieved level of education (measured in three categories: ISCED 1-2; ISCED 3-4; ISCED 5-6), and household characteristics such as living with a partner (as a dummy) and expectations about national economy and own income. Also, labour market status is included as dummy variables. These variables have been systematically found to relate to subjective well-being and have been accounted for in studies as standard controls in analyses of fairness of economic outcomes. As the focus of this study is on the main and interaction effects of IOp and institutional trust (quality) on beliefs about economic outcomes, these variables were treated only as controls. See Table 2 in the Appendix for more details which describes type of variable, definitions, sample means, and standard deviations. Year fixed effects are also included.

#### 5. Results and discussion

If an aggregate figure is to be generated for IOp at an aggregate (macro) level for each of the WB6 countries, such that is reported in relative terms, than this would be the R Square of the model illustrated in Eq.1. In this paper, these figures are reported in Table 3 and they allow for a ranking of the WB6 countries based on the level of IOp generated by individual (micro) level data. Albania (36.5%) Albania in particular and Serbia (27.8%) lead the group in terms of higher shares of IOp captured by differences in initial conditions and social origins which are not under the control of the individual. Kosovo (25.5%), North Macedonia (24.5%), Montenegro (21.6%), and Bosnia and Herzegovina (19.5%) follow with lower shares of IOp. What is interesting to see is the fact that being born in a rural region of birth and self-perceiving your family origin from a lower socio-economic status are the main determinants of IOp across the WB6. So almost 1/5 to 1/3 of the variance in access to a bundle of primary/basic goods is explained by exogenous factors which are not controlled by the individual.

In Table 4 we can see that IOp reinforces the beliefs that successful outcomes in public sector career are not driven by hard work (*I do not believe that in public sector most people can succeed if they are willing to work hard*) and that it is more a matter of connections (*Hard work is no guarantee of success in public sector as for most people it is more a matter of connections*). The same rationale is applicable for the group of items that relate to unfair beliefs about successful outcomes in life in general (*What do you think is the most important for getting ahead in life?*). IOp contributes positively towards beliefs about the unfair distribution of outcomes in the sense of a successful life (which rely on connections, luck, and being born in wealthy family) and towards the most important factors of finding a job at present (*In your opinion, which two assets are most important for finding a job today? Personal contact and/or network of family and friends in high places*).

Expectedly, in all the WB6 countries, higher levels institutional trust reverse the effect of IOp and there are additional positive impacts in terms of such beliefs for those whose access to primary goods is limited due to unfavourable initial conditions at birth (being born in a rural area and being a female) and who perceive themselves as belonging to a lower social class but who have had positive experiences from their interaction with institutions such as courts and judiciary system, parliament, the government, and/or the ombudsman.

Therefore, having unequal access to primary goods due to being born in rural area and

belonging to a lower class family, positively increases the chances that one will believe in unfair determinants of successful employment in the public sector. Then this is in live with previous evidence that people in the WB6 invest more in social capital connections than hard work (Efendic and Ledeneva, 2020). Similarly, this fosters political clientelism and corruption during the political business cycle where electoral campaigns and rewarding of the 'militant politicization' promotes the use of public sector jobs as means to buy votes and political power (Drishti et al., 2022; Imami et al., 2017). In order to achieve the social objective of a just/fair society, new economic reforms should aim not only at high GDP growth but also at eradicating corruption and cronyism, strengthening the rule of law, and strengthening social mobility (Douarin and Mickiewicz, 2022).

#### 6. Conclusions

Inequality is a very important issue of the discourse on development. In this paper we deal with the inequality of opportunity, which arises from factors beyond the control of an individual (circumstances). We observe the factors influencing the inequality of opportunities and how the later affects beliefs about economic outcomes. Our contribution to the literature is mainly empirical and provide an initial estimation of IOp in the WB6 countries at the micro level and a ranking on the macro level, a context where the specific features of these inequalities remain largely understudied. This is the first comparative analysis of opportunity inequality in Western Balkans, a region characterised by weak institutions and democracy.

The research findings show that IOp is positively associated with statements on beliefs about the unfair distribution of outcomes in the sense of a successful life and towards the most important factors of finding a job at present. On the other hand, a higher level of institutional trust reverse the effect of IOp. There are additional positive impacts in terms of such beliefs for those whose access to primary goods is limited due to unfavourable initial conditions at birth (being born in a rural area and being a female), who perceive themselves as belonging to a lower social class and those who have had positive experiences from their interaction with institutions.

Findings are of particular interest to the academic and policy making community because they can create an impact on people integration into society. Therefore results urges for intervention to empower vulnerable groups, namely women and youth from rural areas, by addressing the current infrastructural and institutional gaps and investing toward reducing the inequalities in terms of education, health and labor integration services. In order to control the factors of marginalisation, an holistic approach should be carried which combines efforts to strengthen the implementation legal frameworks surrounding land ownership and inheritance, improve legal literacy, provide capacity building and financial support for boosting rural youth and women inclusion in economy.

The inequality of opportunities influences people decision along their life span. In this milieu, it is interesting to explore in the future the inequality of opportunity effects, as mediated by the quality of institutions, in people copying strategies and decisions, namely their integration in the labour market or migration. Thus, analysing IOp in lights of these decisions is an important issue to be scrutinised in the future. The results would provide evidences for policymakers in fine-tuning policy incentives which support a sustained and inclusive growth.

#### **Declaration of interest**

The authors report no conflicts of interest. The authors alone are responsible for the content and writing of this article.

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## **Tables:**

**Table 1.** Poverty index <sup>a</sup> PCA weights by country and year (inability to afford...)

Country	Rent and utility bills	Loan instalment	Keep home warm	Food, clothes, basic supplies	1 week of holidays
2017					
Albania	0.844	0.613	0.833	0.788	0.703
Bosnia and Hercegovina	0.811	0.754	0.752	0.768	0.599
Kosovo	-0.452	-0.406	0.587	0.554	-0.267
North Macedonia	0.780	0.583	0.708	0.655	0.634
Montenegro	0.787	0.731	0.737	0.735	0.630
Serbia	0.801	0.721	0.791	0.761	0.663
2018					
Albania	0.833	0.581	0.814	0.782	0.707
Bosnia and Hercegovina	0.860	0.760	0.806	0.739	0.594
Kosovo	0.779	0.704	0.756	0.719	0.681
North Macedonia	0.786	0.682	0.775	0.748	0.628
Montenegro	0.790	0.708	0.751	0.749	0.612
Serbia	0.775	0.661	0.774	0.768	0.682
2019					
Albania	0.815	0.611	0.781	0.795	0.615
Bosnia and Hercegovina	0.761	0.678	0.762	0.692	0.624
Kosovo	0.854	0.845	0.762	0.772	0.695
North Macedonia	0.807	0.691	0.784	0.776	0.632
Montenegro	0.815	0.745	0.773	0.726	0.611
Serbia	0.764	0.701	0.771	0.727	0.647
2020					
Albania	0.781	0.552	0.787	0.716	0.692
Bosnia and Hercegovina	0.854	0.723	0.809	0.779	0.627
Kosovo	0.797	0.671	0.694	0.694	0.756
North Macedonia	0.796	0.534	0.756	0.676	0.673
Montenegro	0.794	0.678	0.771	0.708	0.612
Serbia	0.751	0.616	0.733	0.701	0.615
2021					
Albania	0.825	0.627	0.810	0.799	0.749
Bosnia and Hercegovina	0.763	0.738	0.740	0.671	0.533
Kosovo	0.849	0.705	0.829	0.827	0.546
North Macedonia	0.787	0.685	0.763	0.746	0.659
Montenegro	0.806	0.714	0.752	0.752	0.553
Serbia	0.801	0.649	0.789	0.743	0.628

<sup>&</sup>lt;sup>a</sup> Weighted average (from PCA loadings) of items not afforded: 1. Keep home adequately warm; 2. Pay for a week's annual holiday away from home (not staying with relatives); 3. Replace any worn-out furniture; 4. Have a meal with meat, chicken, or fish every second day if desired; 5. Buy new, rather than second-hand, clothes; 6. Have friends or family for a drink or meal at least once a month.

**Table 2.** Variable definitions, sample means, and standard deviations: analysis for pooled sample at the micro/individual level (N=30,186)

Variable	Definition (Questionnaire question)	Mean	DS
Primary goods bundle			
Primary goods index	PCA weighted mean of participants' concerns about not being able to afford 1 'rent or utility bills', 2 'instalment on a loan', 3 'keeping home warm', 4 'food, clothed, and other basic supplies', 5 'affording at least 1 week of holidays'. Response scale 1 if 'yes', 0 if 'no'.	0.14	0.72
Beliefs			
About the public sector labour market success	In public sector, most people can succeed if they are willing to work hard. Response scale 1 if 'Disagree', 0 if 'Agree'.	0.53	0.49
	Hard work is no guarantee of success in public sector as for most people it is more a matter of connections. Response scale 1 if 'Disagree', 0 if 'Agree'.	0.29	0.45
About getting ahead in life	What do you think is the most important for getting ahead in life? Knowing the right people. Response scale 1 if 'yes', 0 if 'no'.	0.32	0.47
	What do you think is the most important for getting ahead in life? Being lucky. Response scale 1 if 'yes', 0 if 'no'.	0.18	0.38
	What do you think is the most important for getting ahead in life? Wealthy family. Response scale 1 if 'yes', 0 if 'no'.	0.09	0.28
About labour market success	In your opinion, which two assets are most important for finding a job today? Personal contacts. Response scale 1 if 'yes', 0 if 'no'.	0.32	0.46
	In your opinion, which two assets are most important for finding a job today? Network of family and friends. Response scale 1 if 'yes', 0 if 'no'.	0.25	0.43
Expectations	n no .		
Own financial situation	What are your expectations for the next year? Do you think that in 12 months your financial situation will be? Recoded to binary as 1 for 'worse', and 0 for 'same' or 'better'.	0.71	0.80
National economy	What are your expectations for the national economy? Do you think that in 12 months the state of the economy will be? Recoded to binary as 1 for 'worse', and 0 for 'same' or 'better'.	0.97	0.82
Institutional trust index	PCA weighted mean about how much trust do participants have in certain institutions: 1 'Courts and judiciary', 2 'Parliament', 3 'Government', 4 'Ombudsman'. Response scale 1 if 'Totally distrust', 2 if 'Tend not to trust', 3 'Tend to trust', 4 'Totally trust'.	2.01	0.86
Demographic characteristics	rond to dust, a roung dust.		
Age	Respondent's age in years	42.40	16.30
Age square	Respondent's square of age in years	2069.17	1507.19
Urban		0.59	0.51
Male	Binary variable, 1 for 'male', 0 for 'female'	0.48	0.49

Primary or less education	Binary variable for highest level of education completed successfully, 1 for 'Primary or less', 0 for 'other'.	0.12	0.33
Secondary education	Binary variable for highest level of education completed successfully, 1 for 'Secondary education', 0 for 'other'.	0.58	0.49
Tertiary education	Binary variable for highest level of education completed successfully, 1 for 'Tertiary education', 0 for 'other'.	0.26	0.44
Labour market			
Family job loss	Someone from your family, a relative, or a friend lost their job	0.37	0.48
Employed or self-employed	Binary variable if the respondent's current working status is, 1 for 'Employed', 0 for 'other'.	0.41	0.49
Household composition			
Couple	Binary variable if the respondent's current civil status is, 1 for 'Married' or 'Lives with a partner', 0 for 'other'.	0.58	0.49
Subjective socio-economic status	parametry of the control of		
Higher class	Binary variable if the respondent's subjective social status is, 1 for 'Above the average', 0 for 'other'.	0.04	0.20
Middle class	Binary variable if the respondent's subjective social status is, 1 for 'As the average (majority)', 0 for 'other'.	0.72	0.45
Lower class	Binary variable if the respondent's subjective social status is, 1 for 'Below the average', 0 for 'other'.	0.21	0.41

Notes: Estimates based on the full sample of six WB countries for years 2017 to 2021.

 Table 3. OLS estimates for inequality of opportunity (coefficients, standard errors)

Variables	Albania	Bosnia and Herzegovina	Kosovo	North Macedonia	Montenegro	Serbia
Uncontrolled circum	stances					
Age	0.003	0.017***	0.004	0.018***	0.012***	0.015***
	(0.004)	(0.004)	(0.005)	(0.004)	(0.004)	(0.004)
Age square	-0.000	-0.000***	-0.000	-0.000***	-0.000**	-0.000***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Rural	0.375***	0.516***	.458***	0.318***	0.523***	0.436***
	(0.039)	(0.036)	(0.044)	(0.038)	(0.041)	(0.042)
Male	-0.055***	-0.048*	0.003	-0.010	-0.063**	-0.036
	(0.021)	(0.027)	(0.024)	(0.024)	(0.025)	(0.023)
Unemployed familiars	0.274***	0.396***	0.379***	0.298***	0.289***	0.358***
	(0.028)	(0.030)	(0.028)	(0.027)	(0.029)	(0.025)
Lower socio-	1.066***	0.812***	1.164***	0.985***	0.867***	0.925***
economic class	(0.026)	(0.035)	(0.039)	(0.031)	(0.031)	(0.027)
Year fixed effects (rej	f. 2017)					
2021	0.260***	-0.035	0.114***	-0.010	-0.075***	0.089**
	(0.043)	(0.042)	(0.038)	(0.038)	(0.040)	(0.042)
2020	0.092**	0.013	0.040	-0.010	-0.191***	0.106**
	(0.042)	(0.042)	(0.038)	(0.038)	(0.039)	(0.042)
2019	0.095***	0.114***	0.007	-0.014	-0.050	0.054
	(0.35)	(0.043)	(0.038)	(0.038)	(0.039)	(0.042)
2018	0.072**	0.011	-0.156***	0.053	0.027	0.082**
	(0.035)	(0.042)	(0.039)	(0.042)	(0.043)	(0.042)
Constant	-0.642***	-0.730***	-0.431***	-0.200***	-0.552***	-0.851***
	(0.089)	(0.092)	(0.094)	(0.034)	(0.095)	(0.100)
N	5038	5013	5023	5028	5023	5061
Inequality of opportunity	0.3651	0.1950	0.2554	0.2455	0.2176	0.2785

Figures in curved parentheses are standard errors.

\*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

Reference category for socio-economic class is 'middle'.

Year fixed effects included in the estimations.

**Table 4.** Probit estimates for beliefs about labour market outcomes for the public sector (coefficients, standard errors)

Variables	Albania	Bosnia and Herzegovina	Kosovo	North Macedonia	Montenegro	Serbia
	I do not believe	that in public sector mo	ost people can succeed	d if they are willing to work	hard	
IOp	0.198*** (0.053)	0.700*** (0.154)	0.546*** (0.155)	0.297** (0.133)	0.258** (0.129)	0.266* (0.146)
Expectations	,	` ,	` ,	, ,	, ,	, ,
Own financial situation	0.042	-0.050*	-0.054*	-0.091***	-0.023	-0.005
	(0.031)	(0.030)	(0.031)	(0.028)	(0.028)	(0.032)
National economy	-0.050	-0.060**	-0.145***	-0.067**	-0.102***	-0.115***
•	(0.030)	(0.031)	(0.030)	(0.027)	(0.027)	(0.032)
Institutional trust index	-0.454***	-0.320***	-0.374***	-0.251***	-0.203***	-0.298***
	(0.026)	(0.024)	(0.024)	(0.022)	(0.019)	(0.022)
IOp × Institutional trust	0.088	-0.198***	-0.303***	-0.070	-0.190***	-0.051
index	(0.072)	(0.077)	(0.073)	(0.064)	(0.057)	(0.068)
Own economic success variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal circumstances	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.650***	0.684***	0.929***	0.484***	0.382***	0.830***
	(0.180)	(0.161)	(0.183)	(0.172)	(0.162)	(0.175)
N	5038	5013	5023	5028	5023	5061
Pseudo R Square	0.0920	0.0457	0.1420	0.0522	0.0508	0.0605
	Hard work is no guard	antee of success in public	c sector as for most p	eople it is more a matter of	connections	
IOp	0.191***	0.394***	0.622***	0.377***	0.198***	0.116**
*	(0.058)	(0.151)	(0.157)	(0.140)	(0.060)	(0.044)
Expectation index						,
Own financial situation	0.075**	-0.091***	0.086***	-0.018	-0.033	-0.095***
	(0.033	(0.031)	(0.031)	(.030)	(0.029)	(0.035)

0.016	0.049	-0.110***	0.012	0.058**	0.113***
(0.031)	(0.032)	(0.031)	(0.029)	(0.028)	(0.035)
-0.288***	-0.125***	-0.183***	-0.121***	-0.117***	-0.130***
(0.027)	(0.025)	(0.023)	(0.023)	(0.019)	(0.024)
-0.026	-0.218***	-0.421***	-0.067	-0.198***	-0.062
(0.075)	(0.076)	(0.071)	(0.066)	(0.058)	(0.071)
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
Yes	Yes	Yes	Yes	Yes	Yes
-1.119***	-0.519***	-0.435**	-0.570***	-0.607***	-0.819***
(0.186)	(0.166)	(0.186)	(0.179)	(0.166)	(0.187)
5038	5013	5023	5028	5023	5061
0.0527	0.0151	0.0372	0.0219	0.0395	0.0249
	(0.031) -0.288*** (0.027) -0.026 (0.075)  Yes  Yes  Yes  (0.186) 5038	(0.031) (0.032) -0.288*** -0.125*** (0.027) (0.025) -0.026 -0.218*** (0.075) (0.076)  Yes Yes  Yes  Yes  Yes  Yes  Yes  -1.119*** -0.519*** (0.186) (0.166) 5038 5013	(0.031)       (0.032)       (0.031)         -0.288***       -0.125***       -0.183***         (0.027)       (0.025)       (0.023)         -0.026       -0.218***       -0.421***         (0.075)       (0.076)       (0.071)         Yes       Yes       Yes         Yes       Yes       Yes         Yes       Yes       Yes         -1.119***       -0.519***       -0.435**         (0.186)       (0.166)       (0.186)         5038       5013       5023	(0.031)       (0.032)       (0.031)       (0.029)         -0.288***       -0.125***       -0.183***       -0.121***         (0.027)       (0.025)       (0.023)       (0.023)         -0.026       -0.218***       -0.421***       -0.067         (0.075)       (0.076)       (0.071)       (0.066)         Yes       Yes       Yes         Yes       Yes       Yes         Yes       Yes       Yes         Yes       Yes       Yes         -1.119***       -0.519***       -0.435**       -0.570***         (0.186)       (0.166)       (0.186)       (0.179)         5038       5013       5023       5028	(0.031)       (0.032)       (0.031)       (0.029)       (0.028)         -0.288***       -0.125***       -0.183***       -0.121***       -0.117***         (0.027)       (0.025)       (0.023)       (0.023)       (0.019)         -0.026       -0.218***       -0.421***       -0.067       -0.198***         (0.075)       (0.076)       (0.071)       (0.066)       (0.058)         Yes       Yes       Yes       Yes       Yes         Yes       Yes       Yes       Yes       Yes         Yes       Yes       Yes       Yes       Yes         -1.119***       -0.519***       -0.435**       -0.570***       -0.607***         (0.186)       (0.166)       (0.186)       (0.179)       (0.166)         5038       5013       5023       5028       5023

Figures in curved parentheses are standard errors.
\*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

**Table 5.** Probit estimates for beliefs about the most important thing for getting ahead in life (coefficients, standard errors)

Variables	Albania	Bosnia and Herzegovina	Kosovo	North Macedonia	Montenegro	Serbia
	What do you	think is the most importar	nt for getting ahead in	life? Knowing the right pe	ople	
IOp	0.210*** (.058)	0.196 (0.145)	0.477*** (0.156)	0.280*** (0.055)	0.265*** (0.059)	0.236*** (0.058)
Expectations	(1000)	(0.2.0)	(0.200)	(31352)	(*****)	(31323)
Own financial situation	-0.027	-0.072**	-0.160***	-0.067**	-0.043	-0.053*
	(0.034)	(0.030)	(0.033)	(0.029)	(0.029)	(0.032)
National economy	-0.068**	-0.099***	0.070**	-0.038	-0.055**	-0.113***
, , , ,	(0.033)	(0.031)	(0.033)	(0.028)	(0.028)	(0.032)
Institutional trust index	-0.152***	-0.087***	-0.060***	-0.009	-0.043**	-0.094***
	(0.028)	(0.024)	(0.025)	(0.023)	(0.020)	(0.022)
IOp × Institutional trust	-0.021	-0.081***	-0.130	0.026	0.069	0.024
index	(0.076)	(0.024)	(0.074)	(0.063)	(0.059)	(.066)
Own economic success variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal circumstances	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-0.201	-0.392**	-1.440***	-0.427***	-0.226***	-0.382**
	(0.194)	(0.165)	(0.202)	(0.177)	(0.034)	(0.177)
N	5038	5013	5023	5028	5023	5061
Pseudo R Square	0.1328	0.0471	0.0778	0.0723	0.0536	0.0733
	What o	lo you think is the most in	nportant for getting a	head in life? Being lucky		
IOp	0.156**	0.446***	0.645***	-0.004	-0.205	0.156
-	(0.078)	(0.162)	(0.197)	(0.145)	(0.142)	(0.062)
Expectations						
Own financial situation	-0.075*	-0.048	-0.028	-0.030	0.092***	0.021
	(0.045)	(0.034)	(0.045)	(0.032)	(0.031)	(0.035)

National economy	-0.004	0.019	0.063	-0.022	0.025	0.019
	(0.043)	(0.035)	(0.045)	(0.031)	(0.030)	(0.035)
Institutional trust index	0.091**	0.036	-0.092***	-0.021	-0.046**	-0.058**
	(0.036)	(0.028)	(0.032)	(0.025)	(0.021)	(0.024)
IOp × Institutional trust	0.030	-0.161**	-0.133	-0.008	0.060	0.003
index	(0.102)	(0.083)	(0.096)	(0.072)	(0.064)	(0.070)
Own economic success variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal circumstances	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-1.472***	-1.265***	-2.424***	-1.026***	-0.960***	-0.975***
	(0.244)	(0.187)	(0.282)	(0.197)	(0.182)	(0.190)
N	5038	5013	5023	5028	5023	5061
Pseudo R Square	0.1053	0.0708	0.1062	0.0901	0.0488	0.0759
	What do you th	nink is the most importan	nt for getting ahead in lij	fe? Belonging to a wealt	thy family	
IOp	0.304***	0.419**	0.224**	0.310*	0.179**	0.143*
	(0.072)	(0.191)	(0.094)	(0.167)	(0.082)	(0.077)
Expectations						
Own financial situation	-0.085**	-0.098**	-0.012	-0.010	-0.054	0.027
	(0.034)	(0.041)	(0.048)	(0.037)	(0.042)	(0.043)
National economy	-0.039	-0.015	-0.083*	-0.072**	-0.064	-0.147***
•	(0.043)	(0.043)	(0.047)	(0.036)	(0.041)	(0.042)
Institutional trust index	-0.068*	-0.096***	-0.111***	-0.107***	-0.048	-0.101***
	(0.038)	(0.034)	(0.036)	(0.030)	(0.029)	(0.030)
IOp × Institutional trust	-0.180*	-0.125	0.039	-0.174**	0.020	0.120
index	(0.094)	(0.103)	(0.108)	(0.087)	(0.083)	(0.088)
Own economic success variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal circumstances	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	-0.179***	-1.501***	-1.284***	-1.199***	-1.299***	-0.945***
	(0.034)	(0.236)	(0.295)	(0.233)	(0.242)	(0.237)

N	5038	5013	5023	5028	5023	5061
Pseudo R Square	0.0829	0.0459	0.0396	0.0917	0.0436	0.0894

Figures in curved parentheses are standard errors.
\*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

**Table 6.** Probit estimates for beliefs about the most important thing for getting a job (coefficients, standard errors)

Variables	Albania	Bosnia and Herzegovina	Kosovo	North Macedonia	Montenegro	Serbia
	In your opinion,	which two assets are mo	st important for findir	ng a job today? Personal c	ontacts	
IOp	0.101 (0.164)	0.267* (0.154)	0.257*** (0.070)	0.205*** (0.063)	0.080 (0.063)	0.445*** (0.065)
Expectations	,	` ,	, ,	` ,	, ,	, ,
Own financial situation	-0.073* (0.037)	-0.054* (0.032)	-0.094*** (0.035)	-0.028 (0.032)	0.018 (0.031)	-0.020 (0.035)
National economy	062* (.036)	0.023 (0.034)	-0.066* (0.035)	-0.054* (0.031)	0.036 (0.030)	-0.048 (0.036)
Institutional trust index	-0.195*** (0.030)	-0.175*** (0.027)	-0.233*** (0.026)	-0.122*** (0.026)	-0.214*** (0.021)	-0.146*** (0.025)
$\begin{aligned} & IOp \times Institutional \ trust \\ & index \end{aligned}$	0.017 (0.081)	-0.038 (0.081)	0.009 (0.080)	0.072 (0.073)	0.089 (0.062)	-0.010 (0.076)
Own economic success variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal circumstances	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.456** (0.205)	0.476*** (0.181)	-0.297*** (0.034)	-0.313 (0.204)	0.127 (0.179)	0.073 (0.193)
N	5038	5013	5023	5028	5023	5061
Pseudo R Square	0.0447	0.0532	0.0597	0.0154	0.0344	0.0387
In your	opinion, which two a	ssets are most important f	for finding a job today	? Network of family and fr	riends in high places	
IOp	0.340*** (0.063)	0.214*** (0.064)	0.601*** (0.173)	.310** (.148)	0.102 (0.141)	0.407*** (0.157)
Expectations	(/	(/	(-· /	\/	( )	(
Own financial situation	-0.051	0.009	-0.164***	030	-0.013	-0.039
National economy	(0.038) -0.040	(0.033) -0.145***	(0.035) -0.021	(.031) 001	(0.033) -0.012	(0.036) -0.078**
	0.036	(0.035)	(0.035)	(.031)	(0.032)	(0.037)

Institutional trust index	-0.092***	-0.136***	-0.268***	-0.111***	-0.161***	-0.144***
	0.030	(0.028)	(0.027)	(0.025)	(0.023)	(0.026)
IOp × Institutional trust	0.172**	-0.068	-0.150***	-0.107	0.013	0.019
index	(0.081)	(0.084)	(0.083)	(0.072)	(0.066)	(0.076)
Own economic success variables	Yes	Yes	Yes	Yes	Yes	Yes
Personal circumstances	Yes	Yes	Yes	Yes	Yes	Yes
Year fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Constant	0.176	0.474**	0.245***	0.008	-0.597**	.093***
	(0.207)	(0.207)	(0.216)	(0.200)	(0.195)	(0.198)
N	5038	5013	5023	5028	5023	5061
Pseudo R Square	0.0582	0.0372	0.0711	0.0272	0.0414	0.0419

Figures in curved parentheses are standard errors.
\*, \*\* and \*\*\* denote significance at the 10%, 5% and 1% levels, respectively.

# **Figures:**

Fig. 1. Government effectiveness, at country level

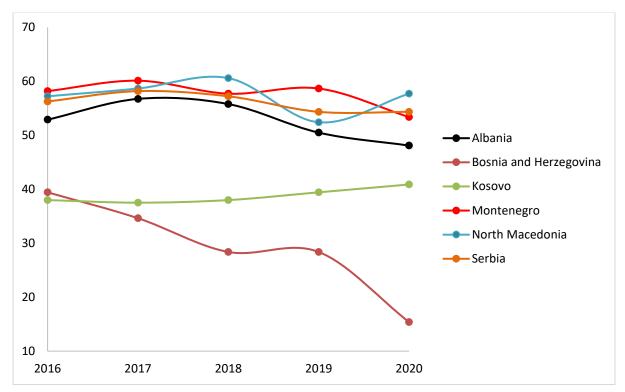


Fig. 2. Regulatory quality, at country level

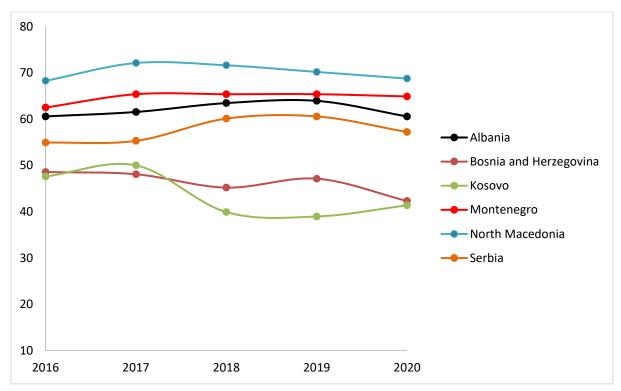


Fig. 3. Rule of law, at country level

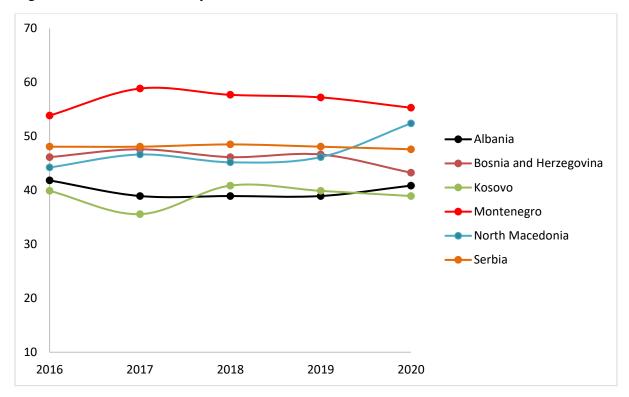


Fig. 4. Control of corruption, at country level

