Inequality and capabilities in an era of rising instability

Giovanni Andrea Cornia

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by

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University of Florence

Introduction: income inequality and capabilities

This paper deals with the relation between the recent rise of overall instability, its impact on income inequality, and changes in the average value and distribution of human capabilities in the fields of health, housing, nutrition and education. This is a broadly neglected topic in the current literature except for some micro studies about ‘development resilience’ (Cissè and Barrett, 2018) which, however, do not raise the issue of whether and why the world faces a generalized increase in various instabilities. Both past theory and empirical evidence have already established a correlation between the level of the Gini index on the one side, and the average level of capabilities and their percentile distribution on the other. Indeed, with few exceptions (see below), an unequal distribution of household income affects the ability of low-income families to allocate resources to health, education, adequate housing and nutrition, and so reduces the capabilities of their members, as well as the average value of such variable for the country analyzed.

A case in which a worsening of the distribution of income may not affect (or only in part, due to microeconomic factors such as family structure and education) the average capabilities level is when the provision of health, education and nutritional and income support is provided by the State. But this is a purely theoretical case. Indeed, the evidence shows that the household share of total health expenditure averages 45 percent in low income countries, 35 percent in middle income ones and 14 percent in the high income ones, with France exhibiting the lowest value (9 percent) (https://data.worldbank.org/indicator/SH.XPD.OOPC.CH.ZS (accessed on 15/6/2022). Income inequality may not affect human capabilities either in the rare cases in which average household incomes rise faster than inequality, as happened in China between 1999 and 2010.

There are no readily compiled statistics on the households’ out of pocket share of total educational expenditure. Such share tends to be high where the public education expenditure/GDP ratio is very low, as in the case of the 1.3 percent observed in 2019 in Bangladesh. Indeed, in low-income countries, households most often pay for school uniforms, books and teaching material, as well as for school transport and meals (where these are available). This makes it impossible for them to send their children to school, reducing in this way their educational capabilities. On average, in 2019 public expenditure on education averaged 3.2 percent of GDP in low-income countries, 3.9 percent in the middle income ones


The author would like to thank Deepak Nayyar, Bruno Martorano, and Miguel Nino-Zarazua for comments on a prior version of this paper. All remaining errors are only his.

2 Such studies generally aim at identifying the characteristics and reactions of different types of households that prevent them to fall below a minimum normative standard of living when they are hit by a covariant shock. In some cases, such studies include also some public policy recommendations.
and 4.9 percent in the high income ones https://data.worldbank.org/indicator/SE.XPD.TOTL.GD.ZS (accessed on 17/6/2022).

As for the informational basis to analyze the trend in capabilities, a growing number of Multiple Indicators Cluster Surveys (MICS) and Demographic and Health Surveys (DHS) allows to compute the trend and distribution of capabilities in relation to an ‘asset index’\(^2\). For instance, Corina and Menchini (2006) juxtaposed changes over 1960-2000 in income growth and distribution with the average mortality changes recorded in 21 countries with at least two DHS covering the prior twenty years. They found that over the 1980s-and 1990s, the Infant Mortality Rate (IMR), Under-5 Mortality Rate (U5MR) and Life Expectancy at Birth (LEB) mostly continued the favorable trend initiated in the 1960s. Yet, during the 1990s, the pace of health improvement slowed down in relation to the prior decades. In addition, the DHS data for these 21 countries pointed to a frequent divergence over time in the within-country distribution of gains in IMR and U5MR of children of families belonging to different quantiles of the distribution of an asset index. The authors concluded by underscoring the similarities and linkages between changes in income inequality and health inequality.

Overall, it seems therefore legitimate to proxy the changes in capabilities on the basis of changes in income inequality. Changes over time in the distribution of income would be strongly suggestive of changes in the average level and distribution of capabilities. In turn, changes in capabilities determine a change in the Human Development Index (Anand and Sen, 1994). Such index is in fact the arithmetic average (normalized in relation to its maximum in the reference year) of LEB, adult literacy and the log of GDP up to the level of an internationally agreed poverty line. Since 2010, the aggregation of its components is based on the geometric rather than the arithmetic average; also, the GDP/c is not normalized in relation to its maximum in the reference year but according to fixed goalposts, while the adult literacy rate is not anymore one of the two variables that, together with the gross enrolment ratio, are used for determining the education component of the HDI. This is now proxied by the mean year of schooling and the expected years of schooling.

Thus, following this line of reasoning, rising instability causes an increase in inequality that proxies the level of human capabilities, which in turn affects the Human Development Index, and the possibility of meeting the SDGs targets by 2030.

This paper argues also that some of the historical causes of inequality explain in recent years a smaller proportion of total inequality while, at the same time, the recent rise in instability tends to affect more than before inequality and capabilities. In this regard, it is surprising that inequality theory and empirical analyses have so far paid little attention to the impact of instability on income inequality and – given the links suggested above – the level and distribution of capabilities and human development\(^3\).

After a brief initial mention in Section 1 of the traditional causes of inequality in developing and low-income industrialized countries during the baseline period (from the decolonization

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\(^2\) An asset index has been constructed and used to proxy household wealth and income; this index includes possession of household durables, quality of dwellings and access to water and sanitation facilities.

An exception is represented by the 2022 Global Report on Food Crises (https://www.wfp.org/publications/global-report-food-crises-2022) that highlights the high number of people in crisis or affected by an extreme lack of food in 2021. The Report identifies the drivers of such problem in: economic shocks, conflicts, Covid-19, weather extremes and forced migration, that is the causal factors discussed in this paper.

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till 1980), the analysis of the changes in income inequality is done for three separate periods: firstly, the neoliberal decades of the 1980s and 1990s; secondly, the period 2000-2010 that experienced a ‘Left Turn’ in some developing and transitional economies. And thirdly, and more challenging, for the years 2010-2020/1 – a period of rising instability in many fields that, as argued in the paper, may – *ceteris paribus* - have affected economic inequality and, hence, the level and distribution of capabilities and the HDI. In particular, Sections 3 and 4 discuss whether the rise in income inequality, observed or presumed, since 2010 was due to an aggravation of the old causes of inequality or to mounting instability.

The paper covers all countries – developing, developed and in transition – though some of the phenomena discussed concern some regions more than others. Likewise, the periodization adopted is not a strict one but refers to the years during which a given phenomenon has become especially intense. Policy recommendations to deal with the phenomena discussed in the paper can only be glanced indirectly from the causal analysis of the changes in inequality and capabilities.

1. **Traditional causes of inequality**

What explained income inequality from 1950 to 1980? Beyond the impact of socio-cultural values, which affect the intra-communal and intra-family distribution of income, the main macro factors that have traditionally influenced income inequality in today’s developing countries and the then less developed industrial countries can be quickly summarized as follows:

1.1. **High land concentration.** The historical dispossession of the peasantry by the colonial powers or local elites raised land concentration and inequality in many countries. For instance, in the 1950s and 1960s, in Latin America the Gini coefficient of land concentration ranged between 0.6 and 0.8, as opposed to 0.3-0.5 in most East Asia and parts of Africa where a smallholder agriculture was prevalent. High land concentration affected inequality and poverty over both the short and the long term. In the short term, inequality was pushed up because of the appropriation by the landlords of a large share of the agricultural output in the form of land rents that absorbed up to 15 percent of the national income, and over half of the agricultural GDP (Londono, 1996). As for the long term, in view of the low labor absorption per hectare of the large estates, a high land concentration depressed land yields and the wage of rural laborers and, through domestic migration, the urban wage. Thus, high land concentration led to a slower agricultural growth than achievable under a smallholder agriculture (Berry and Cline 1979, Corina, 1985). To moderate such effect, during the first three post-World War II decades, at least 27 redistributive land reforms were carried out in South Korea, Taiwan, the Indian state of Kerala, Egypt, Iraq, China and Latin America. In the latter region, 14 redistributive land reforms were implemented during the same period (Thiesenhusen, 1989).

1.2. **The curse of natural resources.** Sachs and Warner (1995) have underscored that countries well-endowed with natural resources relative to other factors of production have a higher income and asset inequality than other types of economies. In mining economies, production requires a lot of capital and skilled labor, but little unskilled and semiskilled workers. Secondly, the high volatility of commodity prices reduces wages and the incentives to invest in education. Indeed, during periods of low prices the poor pull their children out of school because of the high direct and indirect cost of education they have to bear. Thirdly, the ownership of mineral resources usually is highly concentrated, and their rents accrue to national and international elites. Natural resources abundance may reduce inequality only
when governments capture through taxation part of the mining rent and spend it in ways beneficial to the poor as, for example, has happened in Botswana, Bolivia and Malaysia.

1.3. Unequal access to education. Education affects poverty and inequality through several channels. Firstly, in both rural and urban areas, low productivity, low earnings and high risk of poverty are closely related to the level of education of the head of household. Ahluwalia (1976) has shown already long ago that a decrease in adult illiteracy has a positive effect on the incomes of the bottom 40 percent, while a rise in enrolment rates enhances the relative income position of the middle class. In South Korea and Taiwan, for instance, the opening of educational opportunities to all since the 1960s led to rapid growth of productivity and a decrease in inequality. In Brazil, in contrast, the increase in enrolments was slow, and the returns to skilled labor grew for only a small portion of the labour force, while inequality soared. Secondly, education affects the fertility rate and population growth. An increase in female education reduces the risk of poverty, as better educated women earn higher formal sector wages than the uneducated ones, increase their participation in the labour force, and so reduce their fertility rate.

1.4. Urban bias. During the first years after Independence, inequality in many developing countries was exacerbated by the ‘urban bias’ of public policy (Lipton, 1977). Such bias resulted from overvalued exchange rates, pricing policies for inputs and products that penalized agriculture, the over taxation of export crops, an allocation of public expenditure and investment that favored the cities, and the drainage of rural savings for investment in urban areas. The evidence was even more conclusive in the area of public expenditure. For instance, over 1979-81, the share of agriculture in total public spending in nine sub-Saharan countries oscillated between 2 and 26 percent, while the contribution of agriculture to GDP ranged between 6 and 60 percent (Norton 1981, cited in Corina and Strickland 1990).

1.5. Monetarist structural adjustment and neoliberal reforms. A sharp increase in the US rate of inflation following the 1973 and 1978 rise in oil prices pushed the US Fed to raise the discount rate by 10 points over 1979-82. This caused, in turn, a global recession over 1982-84 a long-lasting increase in the balance of payments deficit, and a decade-long debt crisis that affected many developed and developing countries. Poverty and inequality rose sharply, especially in countries that, in order to stabilize their macro economy, followed the monetary approach to the balance of payment (MABOP) recommended by the IMF. At the same time, additional structural reforms were introduced to privatize state assets, liberalize international trade and finance and extend the coverage of the intellectual property right regime by means of the TRIPS compact of the WTO Agreement signed in 2000. Between the early 1980s and 2010, the yearly number of countries receiving short term financial assistance from the IMF averaged between 40 and 60. An analysis of Koujanou-Goldberg and Pavcnik (2007) on the impact of these neoliberal reforms during the 1980s and 1990s found that such measures were regressive. Among them, the international and domestic financial liberalization and a regressive tax reform had the most negative impact on growth, poverty, inequality and capabilities.

large increase in the number of countries with rising inequality. Such trend continued in an
attenuated form in the subsequent decade in the former socialist economies and the OECD
countries, but was counterbalanced by the widespread substantial decline of inequality
observed in Latin America (Corina 2014), Sub-Saharan Africa and South East Asia. In this
regard, see later on Nino-Zarazua (2020) on the redistributive effects of the new wave of
‘social assistance transfers’ that began being implemented around the year 2000, to expand
during the subsequent two decades.

The data for the last decade – that this paper argues was affected by a rise in instability that
ceteris paribus likely raised inequality – exhibit a sharp decline in country coverage in
MENA, South Asia, and Sub-Saharan Africa (see the last line of Table 1) i.e. regions affected
by rising conflicts and other shocks. It shows also a physiological decline in inequality (after a
large increase in the prior two periods) in the former economies in transition, and a
continuation of the declining trend initiated during the ‘Left Turn’ of the 2000s in Latin
America. Only Africa – that was affected by various destabilizing shocks in terms of
pandemics, conflicts and climate change (see section 4) shows a majority of inequality
increases. The statistical and other factors behind these unexpected regional results are
discussed in the conclusions.

Table 1. Changes over time in the Gini index of the distribution of household disposable
income per capita for three periods in developed, developing and transitional countries

<table>
<thead>
<tr>
<th>OECD</th>
<th>European Transition Economies</th>
<th>Asian Transition Economies</th>
<th>Latin America</th>
<th>MENA</th>
<th>South East Asia</th>
<th>Sub-Saharan Africa</th>
<th>World</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980s (or earlier year if available) - 1990s</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rising inequality</td>
<td>14</td>
<td>24</td>
<td>2</td>
<td>14</td>
<td>2</td>
<td>5</td>
<td>3</td>
</tr>
<tr>
<td>No change</td>
<td>1</td>
<td>0</td>
<td>1</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Falling inequality</td>
<td>6</td>
<td>0</td>
<td>0</td>
<td>3</td>
<td>3</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>3</td>
<td>18</td>
<td>8</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2000-2010 (or similar period)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rising inequality</td>
<td>9</td>
<td>13</td>
<td>2</td>
<td>2</td>
<td>4</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>No change</td>
<td>4</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Falling inequality</td>
<td>8</td>
<td>6</td>
<td>0</td>
<td>15</td>
<td>4</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>3</td>
<td>18</td>
<td>8</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>2010- 2019/21 (or similar period)</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Rising inequality</td>
<td>9</td>
<td>6</td>
<td>1</td>
<td>4</td>
<td>0</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>No change</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Falling Inequality</td>
<td>9</td>
<td>14</td>
<td>1</td>
<td>10</td>
<td>2</td>
<td>3</td>
<td>2</td>
</tr>
<tr>
<td>Total</td>
<td>21</td>
<td>24</td>
<td>2</td>
<td>15</td>
<td>2</td>
<td>6</td>
<td>4</td>
</tr>
</tbody>
</table>

Countries covered per region

| | 21 | 26 | 5 | 17 | 18 | 11 | 8 | 54 | 160 |

Ratio (%)

| | 100 | 92 | 40 | 88 | 11 | 54 | 50 | 46 | 62 |

Source: the first two panels are based on Corina and Martorano (2012). The third was compiled by the author on the basis of: the SEDLAC Database (https://www.cedlas.econo.unlp.edu.ar/wp/en/estadisticas/sedlac/) for Latin America; EUROSTAT for the OECD and the Eastern and Central European countries now part of the EU; and
the WIDER-WIID database (version of 30 June 2022), https://www.wider.unu.edu/project/world-income-inequality-database for the other countries.

Notes: Countries have been assigned to the rising inequality, no change or falling inequality categories on the basis of an analysis of their national Gini trends for net income per capita, and of the difference between its initial and final value for each of the three sub-periods considered. With two exceptions, the data for Sub-Saharan Africa refer to the Gini index of consumption per capita. Whenever the Gini index was not available, the ratio of the income shares of the top to the bottom 20 percent was used.

Whenever the change over time in the Gini coefficient was equal to 0.5 points or less, the country was placed in the ‘no change’ group. In some cases, the assignment to the different trend categories is based on relatively modest differences that may change if the reference years were modified. Caution is therefore necessary in interpreting the results, especially those of the developing countries. The last line of Panel 3 gives the percentage coverage of the countries with inequality data in relation to the regional total during the last period. Data for India are missing, while in regions where instability increased substantially (MENA, SSA and Asian transition economies) the data are very or fairly incomplete. The list of the countries included in the various categories can be obtained from the author.

3. Was the inequality rise of 2010-2020 driven by a worsening of its traditional causes, or by new factors?

Do the traditional causes of inequality discussed in Section 1 explain the increase in inequality observed since the rise of instability of the 2010? This is discussed below, following the same classification of causes followed in section 1.

3.1 A persistently difficult access to farmable land. Over this period, the weight of agriculture in GDP declined everywhere but in a few African countries. Meanwhile the share of population living in urban areas in developing countries rose from 33.8 percent in 1960 to 50.6 percent in 2018 due to rural-urban migration and urban population growth. But the number of people living in rural areas reached in the same year 3123 million, a figure similar to that of people living in urban areas, i.e. 3225 million (United Nations Population Division, 2018). This suggests that, on average, the rural-urban income gap is now greater than before because of growing land scarcity. In addition, land concentration increased further as land reforms became less common. For example, Battacharya et al. (2019) show that over 2000-2010 were promulgated only 30 land reforms (including the often regressive land privatization in the former communist countries), as against 76 introduced during the prior decade. Furthermore, the new land reforms had – by design - a smaller redistributive impact, as in the case of the ‘market assisted land reforms’. Meanwhile, there was an increase in unequilizing land grabs whose efficiency, equity and legality are controversial (see the debate between Deininger and Byerlee 2011 on the one side and The Land Matrix Report 2021 on the other). Their number increased from a few per year in 2000 to over 50 in 2009 and to a cumulative total of 1865 by 2020 (Land Matrix Report 2021). Several of these land grabs are not, however, fully implemented because of the legal litigations underway between the ‘grabbers’ and the communities evicted from their ancestral lands in front of a special World Bank tribunal (ibid).

It seems therefore that land inequality has not declined, and may have increased because of mounting pressure on the land, fewer redistributive land reforms, and the spread of land grabs. As a result, an important section of the rural population remains affected by poverty, inequality and stagnant or falling incomes per capita. The International Land Coalition (2021) indicates, for instance, that the number of rural poor is still close to 1.8 billion. Their capabilities are worsening or not improving fast enough to reach the 2030 SDG targets.
3.2. The rise of commodity prices recorded over 2006-2014 (Figure 1) may or may not have reduced the ‘curse of natural resources’. Commodity prices have traditionally been volatile. The Prebisch–Singer theorem predicted that their price, relative to that of manufactured goods, would have declined over the long term, possibly generating in this way a moderating effect on within-country income distribution in case of commodities produced on estates or mines owned by high-income individuals. All this changed however, with the arrival on the world market of resource-poor China (Kaplinsky, 2006). This reduced significantly the prices of manufactured goods while it increased the demand and prices for primary commodities. All this might have increased income inequality in countries exporting oil, minerals and plantation products. But it might have improved it in countries exporting goods produced in small farms and industrial units.

Figure 1. Trend in the indexes of commodity prices (July 2011 = 100), 1993-2016.

3.3. A more equitable access to education. Has the rapid rise in primary and secondary enrolment rates recorded during the last two decades reduced the dispersion of educational attainments, human capital of the workforce and educational capabilities? The empirical literature (Ram, 1990, cited in Londono, 1996) shows that the maximum inequality in education (proxied by the variance in the distribution of the years of schooling of the workforce) rises until its average reaches 6.34. Above this threshold, inequality in education tends to decline. The empirical evidence suggests that where public expenditure on education/GDP rose, the educational capability of the population and its distribution improved. A telling example of this change has been Latin America during the ’Left Turn’ of 2002-2013. A central pillar of its policy package was an increase of public spending on education, which almost doubled in relation to the 1990s (Cruces et al., 2012). Such increase focused in particular on children of the low and middle income groups. This led to a sharp decline in the gap between the enrolment rates of children of quintile 5 and quintile 1. For

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4 It is plausible that the ‘maximum inequality threshold’ in education rises with economic development, structural change and the adoption of skills-intensive technologies.
primary education, such gap fell from 6 to 2. In addition, while it had remained stable between 1992 and 2002, the secondary education enrolment gap fell from 44 to 28. Finally, the tertiary educational gap (that had risen from 23 to 41 over the neoliberal years), remained stable at 41. The update of these World Bank data for 2022 shows that such picture is broadly confirmed.

3.4. A declining urban bias. As noted above, the structural adjustment policies of the 1980s and 1990s attempted to promote the export of traded goods that in many developing countries consisted of agricultural and mining products. This objective was achieved by devaluing traditionally overvalued exchange rates and removing pricing policies for inputs and products which penalized agriculture. Such policy shift was done with great success, for instance, during the Chinese reforms of the 1980s and 1990s. As for the allocation of aid expenditure, the World Bank (2004) noted that – since recently - 49 percent goes to primary education, and 54 percent to health, focusing especially on rural health infrastructure. This has prompted some to talk about an emerging ‘rural bias’ in aid allocation (Jones and Corbridge, 2010). Yet, the number of primary schools and clinics is still smaller in rural areas. Last, the urban bias may have declined thanks to the increased mobility between rural and urban areas achieved by removing restrictions to domestic migration and by developing the transport infrastructure.

3.5 A more equitable approach to structural adjustment. Since the 2007 appointment of Dominique Strauss-Khan to the position of Managing Director, the IMF evolved towards a policy stance where the traditional MABOP package (Table 2) to structural was gradually replaced by a loan conditionality more attentive to the need of investing in human capital, poverty, gender balance and the environment. An important role in this evolution was plaid by Olivier Blanchard, a well-known Keynesian macroeconomist, who held the position of IMF chief economist between 2008 and 2015. Blanchard and other Fund economists criticized – inter alia – some theoretical aspects of the standard approach and published results showing that inequality was detrimental to growth. In addition, in the last few years, the IMF and the World Bank have shown greater concern than in the 2000s about the poverty impact of their traditional measures, and placed growing emphasis on the social safety nets needed to safeguard the poor during structural adjustment. Furthermore, with the onset of Covid 19, the IMF quickly made available to 90 developing countries a Rapid Financial Instrument focusing on the heath sector and the problems of the poor worth one trillion U dollars and, at the same time, facilitated the rescheduling of their foreign debt.

4. New causes of inequality due to a widespread rise in instability
The last decade (starting in some cases during the prior ten years but growing in intensity as time went by) has witnessed a rise of instability in the economic, labor, financial, industrial, and health sectors, as well as in terms of conflicts, climate change and forced migration. These shocks and their inequality and capabilities impact are discussed below one by one, though they are often interlinked. Such shocks have different origins and affect different groups of people and regions, the poorest in particular. But one of their nearly universal features is that they entail a loss of aggregate output and an increase in inequality, that – as argued in this paper - often generates in turn negative second round effects on human capabilities.

The impact on inequality and capabilities is often exacerbated by the sheer absence or limited development of the credit and insurance markets, and by the insufficient availability of public funds and programs to limit the impact of such shocks on the loss of income and wellbeing suffered by a sizeable part of the population. Standard development economics (Ray 1998)
illustrates in fact the sub-optimal production decisions of economic agents due to the underdevelopment of these markets, and their inability to smoothen covariant shocks when access to short-term formal credit is limited, informal credit is too onerous, and new forms of credit based on collective borrowing and credit histories are unavailable. As noted by the IMF, 1.7 billion adults are still unbanked and this strongly affects their wellbeing and that of their dependents. Likewise, the absence or narrowness of the insurance market does not allow the people affected by shocks to compensate the unexpected income losses these cause. Furthermore, the inadequacy of budgetary and aid funds to take care of shocks caused by contingent global externalities (as in the case of the new pandemics or climate change) is a cause of rising inequality and loss of wellbeing and capabilities. This is a situation typical of developing countries, but it is increasingly observed also in industrialized and emerging economies where public funds are insufficient to compensate the losses due to the introduction of policies (such as the closure of markets, firms and restaurants) aiming at limiting the spread of infectious diseases.

4.1 A growing number of financial crises with unequalizing and persistent effects. The structural adjustment programs introduced in the 1980s and 1990s to deal with the 1982-84 world recession and subsequent debt crisis entailed – *inter alia* – the liberalization of formerly ‘repressed’ domestic financial systems of developing and centrally planned economies (Table 2, Panel a). In turn, in the 1990s, a massive surge in cross-border loans and portfolio flows was triggered by the policy of low interest rates adopted in the advanced countries, as well as by progress in the communication technology and shifts in regulatory changes in industrialized countries that allowed mutual and pension funds, insurance companies and banks to invest abroad (Table 2, Panel b). The introduction by hedge fund of exotic financial instruments meant to take care of the default risk, and the diffusion of the infamous ‘asset backed securities’ generated a false sense of security about the reliability of these capital flows. As a result of all this, the total international debt of households, governments and non-financial firms rose from 64 trillion dollars in 2000 to 169 trillion seven years later. Such flows were extremely large in relation to the size of the economy of many developing countries, as they accounted for a high share of the GDP of Brazil (9.4 percent), Chile (25.8), Malaysia (45.8), Mexico (27.1) and Thailand (51.5).

Stiglitz (1998) has argued, however, that left to themselves, liberalized international financial markets cannot behave in an efficient and rational way due to problems of asymmetric information and incomplete markets and contracts, i.e. problems that are particularly pronounced in countries with weak regulatory institutions. The most common problems they entail concern herd behaviour, financial panic, and contagion of the real economy.

### Table 2. Indexes of domestic and international financial liberalization

<table>
<thead>
<tr>
<th></th>
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<tbody>
<tr>
<td>South America</td>
<td>5.1</td>
<td>6.8</td>
</tr>
<tr>
<td>Central America and Mexico</td>
<td>6.7</td>
<td>7.3</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>4.5</td>
<td>5.1</td>
</tr>
<tr>
<td>MENA</td>
<td>3.6</td>
<td>4.6</td>
</tr>
<tr>
<td>Asian Economies in Transition</td>
<td>0.0</td>
<td>2.9</td>
</tr>
<tr>
<td>South Asia</td>
<td>4.7</td>
<td>5.6</td>
</tr>
<tr>
<td>East and South East Asia</td>
<td>5.9</td>
<td>6.9</td>
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<tr>
<td>EE-FSU</td>
<td>0.5</td>
<td>3.2</td>
</tr>
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<td>Advanced Economies</td>
<td>7.6</td>
<td>8.2</td>
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<td>Region</td>
<td>Index 1</td>
<td>Index 2</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>---------</td>
<td>---------</td>
</tr>
<tr>
<td>South America</td>
<td>-0.78</td>
<td>-0.17</td>
</tr>
<tr>
<td>Central America and Mexico</td>
<td>-0.84</td>
<td>0.29</td>
</tr>
<tr>
<td>Sub-Saharan Africa</td>
<td>-0.91</td>
<td>-0.82</td>
</tr>
<tr>
<td>MENA</td>
<td>-0.64</td>
<td>-0.35</td>
</tr>
<tr>
<td>Asian Economies in Transition</td>
<td>-1.75</td>
<td>-1.31</td>
</tr>
<tr>
<td>South Asia</td>
<td>-1.29</td>
<td>-0.74</td>
</tr>
<tr>
<td>East and South East Asia</td>
<td>0.85</td>
<td>0.96</td>
</tr>
<tr>
<td>EE-FSU</td>
<td>-1.84</td>
<td>-0.53</td>
</tr>
<tr>
<td>Advanced Economies</td>
<td>0.83</td>
<td>1.89</td>
</tr>
</tbody>
</table>

Source: Cornia and Uvalic (2012) on the basis of the sources indicated therein. Notes: a) ranges between 0 (total domestic financial repression) and 10 (total domestic liberalization); b) Regional un-weighted averages; c) The Kaopen index varies between -2.5 (complete closure) and 2.5 (complete liberalization).

The result of such poorly regulated financial euphoria led to an endless increase in financial crises – that in many cases lasted a decade or more. Already in 1990-92, Finland and Sweden suffered a crisis following their financial liberalization of 1985-90. Other crises followed in Mexico (1994), Thailand, Indonesia and S. Korea (1997), Russia (1999), Brazil (1999), Turkey (2000), Argentina and Uruguay (2001-2). In turn, the ‘Great Financial Crisis’ triggered by the collapse of the Lehman Brothers Bank lasted from September 2007 till the late 2010s (see later), while the sovereign debt crisis of Greece, Ireland, Spain, Cyprus and Portugal lasted from 2009 to the end of the last decade. It must be noted, however, that not all countries fell into such debt trap and crisis. For instance, India and China avoided a financial crisis through a combination of capital controls, appropriate real exchange rate policies, and a preference for FDI over portfolio flows.

The ‘Great Financial Crisis’ triggered by the collapse of the Lehman Brothers bank was the greatest since 1929 and caused the worst world recession since World War II. Cross-border capital flows dropped by 56 percent since 2007. In the US alone, millions lost their jobs, homes and savings, and the US employment level returned to its pre-crisis level only in 2016. Finally, as already noted, the most unequalizing effect of the liberalization, privatization and globalization promoted by past structural adjustment were precisely those due to the liberalization of domestic and international financial liberalization (Koujianou–Goldberg and Pavcnik, 2007). In addition to the direct effects on inequality due to the drop in GDP and employment, the solution of the bank crises entailed additional distributive distortions that lasted years. The average cost of solving a financial crisis has been put at about 8 percent of GDP, and that of a financial crisis accompanied by a banking crisis at 18 percent. But, bank restructuring costs reached 50 percent of GDP in Indonesia and 33 percent in South Korea and Thailand (World Bank, 1998). With such restructuring programs, governments recapitalized the defaulting banks (that generally belonged to high-income people) by raising the marginal rates of VAT, income tax and various excises that have a regressive incidence. Likewise, all savings of low and middle income people deposited in the defaulting banks were not reimbursed. In the countries hit by financial crises, capabilities were affected for years by rising unemployment, falling incomes, mounting tax rates and cuts in public expenditure.

4.2 Industry 4.0. Structural transformation is a central element of overall economic development. But, already in the 1990s, the economic debate emphasized the distributive changes entailed by the evolution of technology, focusing in particular on the Skill-Biased Technical Change hypothesis. This posited that many new technologies generated a growing demand for skilled workers while, at the same time, the demand for mid-skilled and unskilled workers declined. The redundant workers had thus to find work in the low-paid services sector, in particular in its expanding personal services branch, or become unemployed. Secondly, information technologies allowed to reduce the cost of monitoring the performance of mid-skilled and low-skilled workers, minimize labor shirking, and diminish the wage
premium to be paid to workers to ensure an efficient performance. Thirdly, in some service sectors, the new information technologies simply replaced unskilled or middle-skilled labor and pushed up unemployment. Fourthly, advances in information technologies turned formerly non-tradable services into international tradeable, as in the case of accounting and translations. This created new jobs in low-income countries with an educated workforce but increased unemployment in the advanced ones.

With Industry 4.0, the overall development of countries at the beginning of their industrialization may be delayed. Indeed, as workers leave the low productivity sector, higher connectivity between computers, artificial intelligence and robots may reduce the opportunities to find industrial jobs and earn higher wages. The highly skilled workers who remain employed by Industry 4.0 receive high salaries while the others – both skilled and unskilled - have to relocate to less well-paid and technologically not upgradable service or manufacturing sectors, or become unemployed. This is a first source of rising intra-sectoral wage inequality. Meanwhile, the workers of most service sectors continue to receive low salaries, raising in this way the inter-sectoral wage inequality. Finally, the rise in income inequality may be accentuated by the high degree of market concentration that is becoming evident in the digital industries. Such technological giants are de facto becoming oligopolists which buy new startups before they become competitive. In this way, the Schumpeterian innovation profits accrue only to a few technological and financial giants.

Industry 4.0 derives from a rapid change in labor organization due to increasing interconnectivity between the digital power of computers, artificial intelligence, and the repetitiveness of robots. Through this, fundamental shifts are taking place on how the global production and supply chains operate in industry in advanced and emerging countries. This integration results in increasing automation and improving communication and self-monitoring, as smart machines can diagnose eventual problems without human intervention.

How fast and where is Industry 4.0 spreading? Figure 2 illustrates the number of robots in operation in industry. Their number per 10,000 industrial workers has doubled worldwide, jumping from 66 in 2015 to 126 in 2020. The rise has concerned mainly the advanced and emerging economies, though several developing countries (like Mexico, India, Uganda and South Africa) have also initiated programs in this areas. In 2020, South Korea was the first on the list of the most automated countries, followed by Singapore, Japan, Germany, Sweden, Hong Kong, United States, Taiwan, China and Denmark, and Italy (International Federation of Robotics, 2020).

**Figure 2.** Number of industrial robots in operation
The negative impact on employment and inequality of this trend is already perceptible (UNCTAD 2019, Table 2) and is expected to grow in importance. According to the literature reviewed (*ibidem*), between 9 and 47 percent of workers (mostly in manufacturing and non-personal services) in advanced and emerging societies could be replaced by automation over the next 20 years.

### 4.3 Rising political instability and number of conflicts

The transition to the market economy and liberal democracy that began in Eastern and Central Europe in 1989, and in Asia earlier on, gave rise to huge expectations for political stability, economic prosperity and improvements in living standards. In Eastern Europe, however, things turned out differently, as during the 1990s and part of the 2000s there was a massive recession, rising unemployment, and an unprecedented mortality crisis that over 1989-2014 caused, in relation to the baseline value of 1989, 14 million additional deaths, especially among adult men and, to a lesser extent, women with lower levels of education. With a surge in parental mortality, there was also an increase in the number of orphans and a worsening of their capabilities in many areas (Corina 2022). Also in this case, children of families with low income and education were the most affected.

With the spread of the ‘flower or color revolutions’, and the end of the bipolar USA-USSR strategic balance, capabilities improved in the 2000s and the first half of the 2010s in several regions, with the exception of the Middle East. In more mature political systems, this was facilitated by the spread of electoral competition (Holland and Ross-Schneider, 2017), by which even a shift from a progressive to a conservative regime does not entail cuts in public expenditures that enhance human capabilities – particularly in the case of the ‘new social assistance schemes’ introduced since around 2000 for fear of losing public support on occasion of the next round of elections. An example of such phenomenon is given by the Latin American ‘Half Right Turn’ of 2012-2019 that followed the ‘Left Turn’ of 2002-2012 (Roberts 2019). But, as illustrated in Nino-Zarazua and Santillanes-Hernandes (2021), such phenomenon worked in various ways depending on the degree of democratization of the countries involved.

However, since around 2015, the quality of democracy seems to have deteriorated everywhere. The major ‘democracy indexes’ i.e. the US Freedom House Index, that developed at the V-Dem Institute of Goteborg, and the Democracy Index of the Economist Intelligence Unit (which is discussed hereafter) signal in fact a worsening of the extent and
quality of democracy. The EIU Democracy Index, (2022)\(^5\) points in particular to a marked average erosion of democracy in Latin America (because of the wars in Colombia and Chiapas and the dominance of gangs in Central America), MENA and Asia. Though to a lesser extent, also Western Europe and the USA have recorded a worsening of the EIU Democracy Index. If data for 2022 were available, no doubt they would show a fast worsening trend in several Eastern European countries which have been affected by the war between Ukraine and Russia.

Unsurprisingly, the SIPRI (2022) data on the number of conflicts indicates that a worsening of democracy has gone hand-in-hand with a rise in the number of armed conflicts. All types of conflicts (of strong, medium and low intensity, i.e. with more than 10,000 conflict-related deaths per year, 1000-10,000 deaths, and less than 1000 deaths), have increased. Their total number has gone up from 30 in 2010 to 50 in 2015 and 2020. They have affected the Middle East (8), Asia and Oceania (9) and especially Africa (18) due to the expansion of the Islamic State in West Africa (Burkina, Mali, Niger, Nigeria, etc.) and growing inter-ethnic conflicts in East and Central Africa. Of the 50 active conflicts recorded in 2020, only three were (and still are) fought between states (India–Pakistan, Tajikistan-Kyrgyzstan and Armenia-Azerbaijan) (SIPRI 2022). These conflicts arise from territorial conflicts, a worsening of ‘vertical inequality’ (i.e. among individuals) or, more often, of ‘horizontal inequality’ i.e. among ethnic groups (as in the Horn of Africa) or competing economic groups (as the Fulani herders and the sedentary farmers of the Sahelian countries), or religious groups (as recently occurred in Northern Nigeria, or before the peace agreement of 1998, in Northern Ireland). While inequality within each group may be tolerable, that between groups is often high and rising, and soon it becomes a source of injustice and, in the end, of violent upheavals and armed conflicts (Stewart 1999 and 2015). Horizontal inequality is often ignored in the economic analyses of inequality, while it is central to the enquiries of political scientists who see it as a possible source of conflicts. Econometric and case study evidence firmly established that severe horizontal inequality raises the risk of violent conflicts (ibid).

An increase in the number of conflicts affects negatively not only the number of war-related deaths, but also the number of refugees and Internally Displaced People (IDP) and the level of their capabilities in the fields of housing, nutrition, schooling, and health. All this has resulted in 2021 alone in 150,000 war-related deaths, 13 percent more than in 2020 (ibid). The exacerbation of the involvement of advanced countries in armed conflicts in the Middle East and the spread of the Islamic State are important drivers of the increase in the number of war-related deaths, refugees and IDPs. The situation has worsened further in 2022 with the invasion of Ukraine by Russia, a conflict that has caused so far 100,000 deaths between the two belligerent countries, and a sharp increase in the number of international refugees and IDPs whose lodging and educational capabilities have worsened markedly. But such war has affected capabilities also in several of their neighboring countries, as well as among people worldwide through the sharp increase it generated in the price of food and fuel.

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\(^5\) Such index is based on 60 questions concerning five areas: electoral process pluralism, civil liberties, functioning of governments, political participation, and political culture. For each of these questions, some ‘experts’ fill in evaluations. Also this index, like the Freedom House one, has been criticized for lacking transparency and accountability beyond the numbers. The EIU final report does not indicate in fact what kind of experts are consulted, nor their number, nor whether they are employees of the Economist Intelligence Unit or independent scholars, nor their nationalities. Similar and even stronger criticism has been addressed to the Freedom House Index.
4.4 A growing number of unequalizing health shocks. During the first three post-World War II decades, the world made considerable progress in the fight against infectious diseases that culminated with the WHO-led eradication of smallpox in 1980 and the massive increase in Unicef-spearheaded child vaccination campaigns since 1985. In contrast, in recent years, the world – both developed and developing – has witnessed a wave of viral pandemics of zoonotic origin that, though with different transmission mechanisms and lethality, has affected hundreds of millions of people and, in particular, the lower layers of societies. The list of the main viral shocks of the last 20 years includes: a) HIV-AIDS (see later); b) hemorrhagic fevers such as Ebola and Lassa; c) moderately lethal viral infections transmitted by the bite of mosquitos in subtropical areas (such as Chikungunya, Dengue, Zika and yellow fever); d) Covid 19 (see later); and e) monkey pox, that is endemic in the tropical rainforest of West and Central Africa, but that the WHO has now indicated it generated a worldwide outbreak.

All these pandemics have negative distributive effects and reduce the average health and other capabilities of the people affected and of their families and communities due to loss of income, greater health expenditures, high mortality of breadwinners and reduced time for child care and supervision. Hereafter are discussed briefly the cases of HIV-AIDS and Covid 19, the two pandemics that have caused the highest number of victims and infections during the last two decades.

4.4.1. The case of HIV-AIDS
HIV-AIDS is one of the most fatal infectious diseases. It began spreading in the late 1980s and early 1990s but then grew in intensity and its yearly number of deaths peaked in 2004 at about 1.5-1.8 million. This number declined since then, but in 2020 680,000 people still died of this disease, while 1.5 million got infected by it (UNAIDS Data 2021). It is estimated that since the beginning of the epidemic, 79.3 million people have been infected with the HIV virus and that 36.3 million died of it (Roser and Ritchie, 2014, revised 2019). Globally, an estimated 37.7 million people were still living with HIV at the end of 2020. With improvements in access, by June 2021 28.2 million people had benefitted, however, from the antiretroviral therapy ART (UNAIDS Data 2021).

In some countries (mostly located in Southern Sub-Saharan Africa), HIV-AIDS is still the leading cause of death affecting in particular people of sexually-active age and children contaminated in utero. Except for the latter group, AIDS is mainly a sexually-transmitted disease, and the risk of contagion is highest among women and people with low education, and no access to ART. The social epidemiology of the disease shows that a high prevalence of sexually-transmitted diseases, poor health and nutrition, and risky sexual behaviors typical of low-income people affect the probability of becoming HIV positive. In China the over-use of curative injections and the practice of selling one’s own blood are other sources of infection. Another important risk factor is high mobility, as the protracted absences from home may lead to have sex with multiple partners, as is the case of refugees, truckers, fishermen, soldiers, tradesmen, health workers and teachers (Corina 2007). At the beginning, people with high social status exhibited higher rates of infection than on average. Yet, then, poverty, unemployment, and uncertainty about the future raised the risk of contagion for the poor who were forced in many cases to adopt risky short-term survival strategies. As for the impact of education, the evidence shows that with the spread of information on prevention, incidence rates among educated people fell, and that most of the burden of the epidemic shifted onto
people with low education and ability to absorb messages about prevention. Social norms and religious beliefs, such as attitudes towards pre- and extra-marital sex, condom use, polygamy, wife-sharing, blood brotherhood, and so on also affect the risk of HIV infection. With a rise in the infection and mortality of parents, there is also a major impact on children’s educational, nutritional and emotional capabilities.

4.4.2 The case of COVID-19
Since its onset, there have been over 565 million confirmed cases of Covid-19, while about 6.4 million deaths were reported to the (WHO Coronavirus (COVID-19) Dashboard) accessed on July 22, 2022 (COVID-19) Dashboard With Vaccination Data. The areas most affected by the contagion are Europe (238 million cases) and the Americas (168), followed by South East Asia (59), the Western Pacific (65), Eastern Mediterranean (22) and Africa (9). The virus spreads through tiny droplets of saliva emanating from the breath of infected people. It affects in particular the elderly over 60 and people with important co-morbidities. So far it has been more contagious but less lethal than HIV-AIDS.

Covid-19 affects the most people that - because of their jobs have to work in construction, food markets, the health sector, public transport, etc. i.e. jobs that entail a high number of daily contacts with other persons. People working in these sectors cannot do ‘remote work’, while people in finance, administration and teaching can do it whenever it is necessary. Likewise, low-income families often lack refrigerators, and so have to travel daily to crowded markets to buy food and other essentials. And the children of low-income families generally do not have access to a personal computer to follow from home classes imparted in a dual fashion. Such people may also have a lower level of education and are less prone than better educated folks to adopt the prudential measures suggested by the public authorities to limit the spread of the disease. In addition, in low- and middle-income countries these people are less likely to be covered by state or collectively-financed health services (vaccination and risk screening programs)/ https://www.cepal.org/en/subtopics/covid-19. Finally, Covid-19 affects more also the elderly living in rest homes where contagion is common. Thus, there are strong suggestions that Covid 19 entails greater losses of livelihoods for the poor and greater exposure to contagion than for other social classes. Their capabilities and life expectancy may thus deteriorate more than for higher income groups.

4.5 Climate change and ecological refugees. During the last two decades, an additional shock to the capabilities of people has been represented by ‘climate change’ in the form of a global warming leading to a melting of glaciers, snowfalls, the ice caps of the Artic and Antarctica, a rise of the Oceans, and the drying up of rivers. The earth has already witnessed an increase by one degree in its temperature, and the world community has committed itself to fulfill the target set by the Paris Agreement to keep the global average temperature rise to a maximum of 1.5°C by 2030. Climate change is well-known to be due to the global warming caused by the effect of emission of which has hardly been reduced, including because of the still important subsidies to fossil fuels provided by many governments.

Global warming has given rise to a long list of extreme whether events which affect negatively income inequality and the capabilities and wellbeing of a large number of people. The International Panel on Climate Change (IPCC) has estimated that in a few years three billion people may be affected by the ‘climate change’ threat. A simple example illustrates the gravity of the problem: The Ministry of Health of Italy, a high-income country with a
comprehensive health care system, recorded in July 2022 a 27 percent increase in the overall number of deaths in relation to 2021 because of the extreme heat recorded during such month.

Besides the heat waves, the adverse weather events include wild fires, droughts, heavy rains, floods, landslides, tornados, hurricanes, and so on. Part of the literature (Alimonti et al 2022) suggests that the increase of most of these events concerns modest manifestations of the problem, or may be the results of improved registration systems in recent years. But, while such improvements may affect the comparability of data on climate change over very long periods of time, such hypothesis is less plausible in the case of changes that have occurred during the last 15-20 years. In contrast, the 2021 Lancet Countdown Report on health and climate change (The Lancet 2021) comes to different conclusions about the impact of climate change. In its Figure 1 of such report shows a marked increase in the number of person-days of heatwave exposure relative to 1986–2005, while Figure 3 below it shows that the amount of land affected by drought rose from 5-10 percent of the total between 1959 and 2010, to over 20 percent in 2019.

Figure 3. Percentage of total land affected by drought

It also illustrates the loss of millions of hours of work (especially in agriculture and construction) due to heat-related factors. And it indicates that the rise in temperatures has facilitated the spread of infectious diseases such as malaria and dengue (see section 4.3).

In very poor countries drought and climate change has given rise to a massive surge in the number of ‘ecological refugees’ escaping to neighboring less affected regions, or – if they can finance their trip - to countries of the Global North. The International Organization of Migration (IOM) shows that of the total of 38 million new IDPs registered in 2021, 23.7 million were due to disasters ([https://www.migrationdataportal.org/themes/environmental_migration_and_statistics](https://www.migrationdataportal.org/themes/environmental_migration_and_statistics). The top 5 most affected countries were Afghanistan (1.4 million), China (9.4), Philippines (0.7), Ethiopia (0.579), and South Sudan (0.527).

While most migration in the context of climate change occurs within the domestic borders, some people are forced to move abroad. Global data on cross-border movements in the context of disasters are, however, limited, with only a few cases having been documented and
analyzed so far. Some populations might not be able to move due lack of resources, disability or cultural reasons, such as an ancestral link to their land. These “trapped populations” are usually among the most vulnerable to climate change as they are unable to pursue migration as an adaptation strategy.

Climate-related migration has contributed to the rise of the global stock of migrants from 2% of the world population a century ago to 3.5% at the present time. While this is not necessarily negative, especially in view of the demographic decline of the advanced countries, its impact is often unequalizing in both countries of origin and destination, as suggested by the ‘hump theory of migration’, though some of the latest evidence contradicts these conclusions.

Informal migration related to climate-change (as well as to conflicts and economic reasons) has generated also a high number of deaths. The Missing Migrant project (https://missingmigrants.iom.int/) of IOM documents with full details the death or disappearance of over 50,000 informal migrants reported to its field offices between 2014 and 2021-22. Half of these deaths occurred in the Mediterranean Sea. This is certainly a massive underestimation of the real number of deaths of informal migrants given the sparse presence of IOM field offices in most parts of the world.

Conclusions

As noted when discussing the results of Table 1, some of the traditional causes of high inequality have remained relevant for explaining high level or increase in overall inequality. This is obviously important from a policy perspective, and suggests continued interventions to deal with – for instance – the persistent problem of access to farmland in some regions.

While the paper emphasizes the role of rising instability in five areas and its impact on inequality, capabilities and human development, the data in Panel 3 of Table 1 show, except for Sub-Saharan Africa, fewer increases in inequality than expected on the basis of the theoretical arguments and evidence of rising instability presented in Section 4. While waiting for the results of detailed country-specific analyses, one may venture to suggest that statistical and measurement problems may explain in part the discrepancy between the proposed theory and the evidence presented in Table 1 about inequality rises during the last 10-15 years. To start with, it is well-known that the Gini coefficient used in Table 1 reflects more accurately changes in the value of the central deciles than in the tails of the distribution (Atkinson and Bourguignon 2015). Changes in the ratio of the income share of the top to the bottom decile (that are unfortunately rarely available) may show a different picture. Secondly, most of the countries affected by acute instability and war during this decade (such as Syria, Iraq, Yemen, South Sudan and others) are not included in Panel 3 of Table 1 for lack of data. This is particularly true in the case of war-affected MENA region where, for the last decade, data on income inequality were available for only two countries out of 18. Changes over time in the number of countries in each region affect the results of Panel 3 that is in this way biased towards the exclusion of countries affected by the new instabilities, and towards the inclusion of more stable nations, such as the industrialized countries, the European economies in transition and several Latin American nations. Thirdly, at least in the case of climate change, political instability, conflicts and pandemics, it is likely that – even where an income survey is carried out – this is affected by a large ‘sample attrition’ over time, as the regions affected by new crises (such as the Rohyngia region in Myanmar) are likely excluded from the sampling, including for security reasons.
Fourthly, the refugees and IDPs affected by the new instabilities and those who died or escaped simply ‘disappeared’ from the household surveys that measure the income/c of the ‘present population’. The impact of instability on inequality and capabilities is thus lost, particularly in severely affected countries. Fifthly, and very important, as noted in section 3, improvements in some of the old causes of inequality (see section 3) may have compensated in part the unequalizing impact of the new instabilities. Along the same lines, it must be noted that during the last twenty years, there has been a massive increase in conditional and non-conditional income transfers in cash and kind, that according to the UNU-WIDER SAPI Database on ‘Welfare and Redistributive Effects of Social Assistance in the Global South’ compiled by Miguel Niño-Zarazúa and colleagues (published on 21 January 2020) https://www.wider.unu.edu/project/sapi-social-assistance-politics-and-institutions-database has reached around one billion people in developing countries thanks to a massive increase in the New Social Assistance Programs (CCT, CT, social pensions, disability pensions, in-kind transfers and public works). The global number of such redistributive programs in the Global South increased from 80 in 2000 to around 180 in 2015 alone. Also, such resource transfers – that at least in some cases may not be recorded in surveys on income/c - may have offset part of the inequality impact of the new instabilities. For instance, in India, where no household income/c survey has been carried out since 2012, there has been a rapid increase in the number of billionaires and, likely, in income inequality (Chancel and Piketty, 2019). Yet, Bhalla et al (2022) show there was instead a modest decline in the Gini coefficient of consumption inequality between 2011 and 2020 thanks to an increase in expenditure on food subsidies by the Public Distribution System of India.

Summing up, Panel 3 of Table 1 underestimates the increase in inequality due to the rising instability documented in Section 4 because of two main reasons. Firstly, because: most countries affected by acute instability are not included in Panel 3; the regions of countries affected by acute shocks are not covered by recent national household surveys; even where surveys have been taken, the IDPs and refugees who escaped or died because of the new instabilities are no longer included in them; and the choice of the Gini index, rather than the inter-decile ratio, may have clouded the picture. Secondly, in countries less affected by shocks and statistical problems, the unequalizing impact of rising instability may have been compensated in part by the lessening of some of the old causes of inequality during the last two decades and the massive expansion of social assistance transfers.

In conclusion, this paper has tried to bring the issue of the impact of rising instability to the attention of researchers and policy makers. It is hoped it will trigger a new wave of studies to illustrate the impact of instability on inequality, capabilities and human development. More work is indeed needed to clarify the statistical issues mentioned above, while it is hoped that detailed studies can help disentangling the impact of instability on inequality and human development.

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