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Economic Inequality and Conflicts: An Overview

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Abstract

This article reviews the main points of the academic debate relative to the relationship between economic inequality and conflicts. After clarifying what is meant with the expression 'economic inequality', I recall how it is measured and report the basic facts on income and wealth inequality within countries, across and between countries and at the global level and provide the possible explanations for them. I then discuss the main question posed by this article, namely the correlation between economic inequality and conflicts. The possible correlation existing between within countries inequality and internal conflicts is also examined, together with the role played by social capital, that can be undermined by economic inequality. Finally, the correlation between cross-country inequality and external (or international) conflicts is analyzed, one of the most relevant of which today is represented by migrations.

Introduction

In this article I review the main points of the academic debate relative to the relationship between economic inequality and conflicts.

Economic inequality may refer either to income or to wealth. Given that the *stock* of wealth inequality would seem to be determined by the *flow* of income inequality, we might be tempted to focus just on the latter. However, the opposite causal relationship might also apply: wealth inequality may induce income inequality when it becomes a pre-condition for getting the best jobs, for example because it allows to pass them from one generation to the other or because it allows to undertake the investments – especially those in human capital and in relational networks - that are necessary to obtain well-paid jobs. This would represent an environment of inter-generational immobility – as the

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paper by Franzini and Raitano in this Thematic Issue shows. Whatever the causation order is, this means that it is quite unlikely that the income and wealth inequality will follow different directions. Moreover, it would be also quite difficult to disentangle the effect of income inequality and wealth inequality on conflicts. Still, I will discuss as much as possible the differences between them, especially because economic theory draws opposite conclusions from the presence of one or the other (but economic policies do not always follow the conclusions of the theory).

A perhaps more significant distinction on which I will draw my attention – in view of understanding the role it plays on conflicts - is the one between *within countries* inequality and *cross-country* inequality, although one might consider also *weighted cross-country* (or *between-country*) inequality and *global* inequality. *Within* and *cross-country* inequality have increased over the past three-four decades for several reasons that have been discussed both in this paper and – providing an interesting historical perspective – in the paper of Petit in this Thematic Issue.

In order to discuss the relationship between economic inequality and conflicts we should also clarify what we mean with the latter. Conflicts may have a different nature. We might refer either to internal conflicts - including lack of social cohesion and trust, conflicts between different groups of residents, or between residents and migrants, violent crimes, social unrest and civil wars - or to external conflicts, including international terrorism or wars between countries. May be not surprisingly, the first category of conflicts appears associated with within-countries inequality while the latter with cross-countries or between-countries inequality, an aspect that the literature does not seem to underline.

In this article I do not address other kinds of inequalities, like existential and gender inequality, that are also quite relevant and that are considered in the paper by Khondker contained in this Thematic Issue.

It should be acknowledged from the very beginning that the literature on the relationship between economic inequality and conflicts is far from conclusive. The empirical evidence does not always confirm the intuitive correlation that would seem to exist between the former and the latter. One possible explanation is provided by the observation that conflicts do not have to be necessarily two-sided, like civil wars, but may well be one-sided, when repression prevents their open outbreak. As a matter of fact, the actual or

expected repressive strength of the richest or more powerful groups against the poorest/less powerful ones may play a significant role, so that the cost of revolting against the injustice (the "opportunity" of rebellion) may matter more than the injustice itself. In other words, a cost-benefit analysis is performed and if the cost of injustice is still lower than that resulting from rebellion, the *status quo* prevails. This is also associated with problems of collective action and agents' coordination inducing free riding, such that in the end very few citizens will decide to join in the rebellion and repression will easily prevail.

Economic inequality can be distinguished in horizontal and vertical. Horizontal inequality refers to different groups and can be based, for example, on political discrimination – affecting different ethnical or social groups within a society – on age cohorts discrimination (intergenerational inequality), on regional discrimination (territorial inequality) or on the discrimination relative to the different jobs of workers (occupational inequality). Vertical inequality is based instead on economic discrimination relative to the difference between poor and rich individuals.

Such an inequality, however, may be less relevant than *equity* (*honor* in the words or Aristotle, reported by de Soysa and Vadlamannati in this Thematic Issue), which reflects the *fairness* of the functioning of the system and that might well explain why economic inequality does not necessarily cause any grievance and rebellion. On this aspect, the rich paper by de Soysa and Vadlamannati in this Thematic Issue adds many relevant elements.

The rest of the article is organized as follows. Section 1 focuses on the evidence on *income* and *wealth* inequality, *within countries*, *across* and *between* countries or at the *global* level. In doing that, I clarify what is meant with the expression 'economic inequality' (Section 1.1.), I recall how economic inequality is measured (Section 1.2), I report the basic facts on income and wealth inequality at the different levels (Section 1.3.) and provide some explanations for them (Section 1.4). In Section 2. I discuss the main question posed by this article, namely the correlation between economic inequality and conflicts. In Section 2.1. I discuss the correlation existing between *within* countries inequality and *internal* conflicts. Section 2.2. defines social capital, examines its role and explains why it could be affected by economic inequality. In Section 2.3. the correlation between *cross-country* inequality and *external* (or *international*) conflicts is addressed. Some concluding remarks close the paper.

1. The data and evidence on income and wealth inequality: within countries, cross-countries, between countries and global inequality

1.1 What do we mean with 'economic inequality'?

Economic inequality may refer either to income or to wealth. Considering the former, we talk about cross-country inequality when we compare the average per capita income of different countries by treating them as being all-alike, so that no adjustment is made to account for differences in the size of population, extension of the territory, or gross domestic product. When considering crosscountry inequality, therefore, we also ignore the inequality occurring within countries, since we just refer to the average GDP income per head. Weighted cross-country inequality (or between countries inequality) is calculated instead by comparing the average per capita income of different countries after weighting it by the relative size of the respective population. This is an important correction because it allows taking into account the fact that countries may be very different in terms of population (let us think about countries like China and India, whose population is respectively about 1.410 billion and 1.350 billion people - but with India growing much faster than China - compared, for example, to some less populated countries like Africa - at least for the time being. Both cross-country and weighted cross-country inequality can refer to a comparison between single countries or different groups of countries like the group of least developed, developing or developed ones.

Within country inequality refers instead to the degree of inequality within each country.

Finally, we can refer to *global (headcount)* inequality, which is calculated by considering the world population as belonging to a single nation, as earth planet should be thought of, and therefore referring to the inequality of income between *persons*, rather than between *countries* (Loungani, 2003, p. 22).

The difference between *weighted cross-country* inequality and *global* inequality deserves some comments, since the two concepts might appear, at least at first sight, rather close to each other, if not even overlapping (when the correct weight is assigned to each country, the resulting income distribution would seem to coincide with the world income distribution across individuals). The difference between the two concepts, however, is due to the fact that while the

former considers the *average* income of each single country, the latter uses the *actual* income distribution within each country, so that the latter is a certainly more accurate measure of world inequality (Targetti and Fracasso, 2008, footnote 3, p. 503). Needless to say, the same distinction can be made by considering wealth, rather than income.

Attention, however, has been devoted more to income inequality than to wealth inequality. As a matter of fact, according to orthodox economic thinking, the former is supposed to provide the 'right' incentives to people – what Bowles dubbed *egalitarian pessimism*. It should be observed, though, that economists and policy makers quite often ignore wealth inequality in spite of the fact that it could be argued that it would produce the 'wrong' economic incentives. As a matter of fact, inequality is not poverty and the eradication of the latter might well coexist with an unequal society. An unequal society should not prevent "the tide to lift all boats" nor for growth to "trickle down" to take the poorest sections of society out of poverty. This is why, after all, in spite of the recent great attention that has been devoted to inequality, it was almost ignored until recently (for example, the UNs Millennium Development Goals included poverty reduction, but they did not even mention inequality!).

A rather simple observation, however, leads to cast some doubts on neglecting income inequality: if it increases efficiency by providing the right incentives to economic agents, then why have we experienced lower GDP growth rates during the recent decades in which the degree of inequality has increased?

1.2. How can economic inequality be measured and represented?

Inequality can be measured in different ways. The simplest one is just to draw the income (or wealth) distribution of a given (country or world) population, reporting in a graph the percentage of people (on the vertical axis) which is earning different income intervals (on the horizontal axis). The cumulative distribution also provides a first intuition of the degree of inequality within countries, across countries or globally: it shows what is the percentage of people earning an income below a given level.

The Lorenz curve represents inequality in a very intuitive way by representing on the vertical axis the cumulative percentage of overall income and on the horizontal axis the cumulative percentage of the overall population. A situation of perfect equality is obtained when each cumulative percentage of people obtains the same cumulative percentage of income (for example, 30 percent of the population receives 30 percent of income). The highest possible inequality is instead when all income is perceived by just one person (Brandolini, 2001).

The degree of inequality can be represented also by a synthetic descriptive index that can be constructed, for example, starting from the Lorenz curve. One of the most popular indexes is the Gini coefficient, which is the ratio between the area of inequality (given by the difference between the area included below the 45° line representing the absence of inequality and the area below the Lorenz curve) and the area of equality represented by the area below the 45° line. The value of the Gini coefficient is, therefore, included between 0 and 1. Needless to say, when the area of inequality is close to zero, the index takes a value that is also close to zero, whereas the higher the area of inequality, the closer the coefficient gets to 1¹.

Another significant - *ethical* rather than *descriptive* - synthetic index, is the one devised by Atkinson (as described by Brandolini, 2001). This index aims at evaluating the loss of welfare caused by an unequal income distribution, so as to measure what would be the difference between the average income and the one that would produce the same welfare if distributed equally: the higher the difference, the higher the ethical index of inequality.

Other methods can be used to provide useful indications as to the degree of inequality. One of them implies the comparison between the share of the income going to different groups of the population (for example, the share of the total income received by the richest - or poorest - 1 percent or 10 percent of the population, or the ratio between the income perceived by the 1 percent or 10 percent richest people compared to the income perceived by the 1 percent or 10 percent poorest people).

Data used in the construction of indexes are also quite critical, since it is possible to use both data deriving from national accounts and sample data (that may refer either to individuals or to household surveys). Needless to say, the many different ways to use data or construct indexes implies that results may often diverge from each other, with researchers often focusing on those that they deem more satisfactory from their point of view².

¹ Another synthetic descriptive index which is often utilized is the Theil's index.

² Loungani (2003) refers to this point as the title of his work " Inequality: Now you see it, now you don't " already suggests.

1.3. Facts and data on economic inequality

1.3.1. Between countries inequality

Many critics of globalization underline the fact that the difference between developed countries on one side and least developed and developing countries on the other side has been increasing over time³. As a matter of fact, the ratio between the GDP per head (headcount income) of developed countries and that of least developed and developing countries was 11 in 1870 and became 52 in 1985 (Bonaglia and Goldstein, 2008)⁴. Shaikh (2007) also reports, by referring to the work of other authors, that in 1980 the richest countries had median incomes 77 times greater than the poorest ones, while by 1999 the same value was 122! In line with these results, Das (2004) reports the findings of the World Bank (2002), according to which income inequality has increased between the more globalized and the least globalized developing economies during the years 1980-2000.

This might lead to conclude that globalization has been operating in a manner that differs from what is predicted by neoclassical models, more precisely the Hecksher-Ohlin-Samuelson model, according to which commercial opening should lead to the convergence of wages and per capita income.

Other data show, however, that during the second phase of globalization (the one that started after World War II) the income share of the 10 percent richest countries had at least stabilized, while it increased again during the third phase, initiated after the 1970s of last century and characterizing the neoliberal

³ See Della Posta (2018) for a detailed account of the process of globalization.

⁴ According to de la Dehesa (2006, p. 29), reporting also the position of other authors, the high degree of inequality between the 'North' and the 'South' of the world finds its true roots in the industrial revolution. It is difficult, however, to distinguish the role played by colonialism from that played by industrial revolution and to ascertain that international power and military hegemony have been irrelevant in determining the economic success of Britain and the destruction of the Indian manufacturing industry – the world leader of textiles production and exports before the English *take off.* As a matter of fact, other analysts argue that it is not by chance but because of well-defined economic and military policies that while in 1750 the Third World accounted for 73 percent of world manufacturing production, in 1830 and 1913 this share went down to 50 percent and 7.5 percent respectively (Bairoch, 1982, reported by De la Dehesa, 2006, p. 30).

revolution represented by the advent to political power of Margaret Thatcher and Ronald Reagan. Table 1 also shows that the divergent trend stops from the 1950s onwards. As a matter of fact, over the period 1970-1992, the ratio between the income of the 10 percent richest countries and the income of the 20 percent poorest ones increased only slightly and got stabilized around 23 percent.

	1820	1950	1970	1992
Income share of the 10% richest countries	42,8	51,3	50,8	53,4
Income share of the 20% poorest countries	4,7	2,4	2,2	2,2
Ratio between the income of the 10% richest countries and the 20% poorest countries	9,1	21,2	23,4	23,8

Table 1. Income share of the richest and the poorest countries

Source: Bourguignon, F. et al. (2002)

The relative stabilization of the degree of income inequality between rich countries and least developed and developing ones is the result of two different tendencies⁵.

The first one relates to the fact that the difference between the richest and the poorest countries has been increasing over time, as the evidence reported above shows clearly. The second element, pointing to the opposite direction and compensating this diverging tendency, has to do with the fact that by considering globalizing countries (including China, Indonesia and, to a lesser extent, India), rather than the least globalized ones, since the late 1960s inequality *vis-à-vis* developed countries has been decreasing thanks to the higher rates of growth experienced by the former compared to the latter⁶.

Such differences are also reflected in the different outcomes obtained when

⁵ As reported by Das (2004, p. 93) who refers to Clark *et al.* (2001), inequality between the *industrial* countries has been decreasing over time, being in 1995 half of what it was in 1980 and in 1980 half of what it was in 1960.

During this period the countries that are now defined as 'globalizing' (and that can be defined as 'developing') have started to industrialize at the expenses of the developed ones, who began to dematerialize their productive processes and to develop their (tertiary) sector of services: industrial employment in Europe corresponded to 41 percent of the total in 1950, 28 percent in 1998 and less than 24 percent in 2006 while, over the same period, in the so called NICs (Newly Industrializing Countries) it went from 14 percent to 27 percent and in India and China it went from 10 percent to 20 percent (De la Dehesa, 2006, p. 31).

considering weighted and unweighted cross-country inequality. When considering countries as if they were all alike, it turns out that inequality has been increasing over time (UNDP finds that while in 1960 the per capita income of developed countries was 30 times higher than that of the poorest ones, in 1997 it was 74 times higher). When assigning the appropriate weights to them, instead, in particular by considering the role played by big countries like China, India and Indonesia, de la Dehesa (2006, p. 32) finds that those results become much less dramatic, while Loungani (2003, p. 22) even concludes that between countries inequality has been decreasing over time.

1.3.2. Within countries inequality

Inequality within countries has been increasing over time worldwide. In many developing countries, like Argentina, Brazil, Colombia, China, India and Mexico the wage differential between skilled and unskilled labor has increased. Moreover, both China and India have experienced an unequal distribution of development, with costal and urban areas developing much more than internal and rural ones, which contributes to explain the surge of inequality within those countries. One of the few exceptions is represented by a country like Korea, characterized by a Gini coefficient of about 0.3 (indicating a rather low level of inequality) that has not been growing in spite of the economic growth of that country.

Das (2004) and Targetti and Fracasso (2008) observe that income inequality within industrialized countries has also increased. This is true also if we consider the degree of inequality within developed countries as a whole, rather than within each of them. By concentrating on the income distribution between the US and Europe, for example, it turns out that over the last decades the US income has been increasing at a rate which is much higher than the European one.

If we consider, however, inequality within different developed countries or regions, we find, as reported by Loungani (2003) that the Gini coefficient in the United States has increased over time so as to reach approximately the value of 0.4, while in other developed countries (Japan, Canada, many European countries) it has remained rather stable over the last decades, a result that certainly reflects at least partly the redistributive policies adopted in those countries, characterized much more than the US by the adoption of social programs.

1.3.3. Global income inequality

By considering the world as if it was made by one single country, that is by referring to the concept of *global income* inequality, Sala i Martin (2002a, 2002b, quoted by De la Dehesa, 2006, p. 32) finds instead that world personal income distribution had improved slightly since the 1980s. Similar conclusion was reached by Melchior *et al.* (2000) cited in Das (2004, p. 95), who found that *global income* inequality decreased by 10 percent between 1965 and 1997. The explanation for this result is rather easy, if we consider the contribution given by large countries like China and India, where poverty has been reduced dramatically and income per capita has increased.

1.3.4. A synthesis

It is possible to synthesize the results described above with the help of Table 2. below (whose frame and structure is borrowed from Loungani (2003, p. 23)), which reports the different concepts of inequality and the different conclusions relative to developed, developing and less developed countries.

Different concept of income inequality	What it measures	What the evidence shows	
Cross-country inequality	Inequality of average incomes across countries unweighted by the size of the population	Divergence between developed and least developed countries Convergence between developed and developing countries Divergence when considering all countries in the world	
Weighted cross-country inequality	Inequality of average incomes across countries weighted by the size of the population	Convergence	
Global inequality	Inequality between rich and poor people as if the world was made up of just one country	Convergence	
Within-country inequality	Inequality between rich and poor people within each single country or group of countries	Stable in some developed countries (Japan, Europe, Canada). Divergence in the United States and in most developing and least developed countries.	

Table 2. Different measures of inequality (frame borrowed from Loungani, 2003).

These results may also be summarized showing how *global* inequality (as measured by the Gini coefficient) has been decreasing over time, while the overall *within country* inequality has been increasing over time.

One of the possible explanations for such a diverging tendency has to do also with the consideration of the different timing of their economic development: the fact that African countries have not started their take off yet, while other countries have been doing so over time, may explain the larger difference between the latter and the former (De Grauwe, 2009).

Figure 1 shows the rather generalized rising (with the only exception of the Eurozone) of *within* countries income inequality.

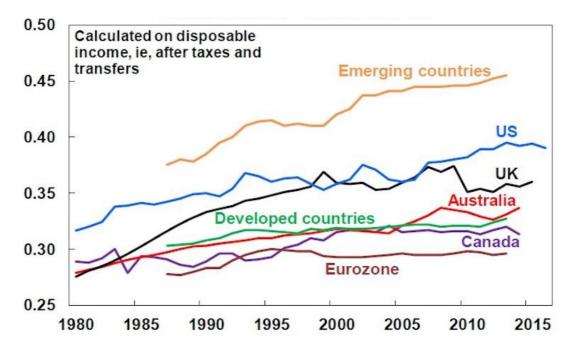


Figure 1. Rising within countries inequality: Gini coefficients (Source: OECD, Standardised World Income Inequality Database)

The same applies to China, as clearly shown in the Figure 2.

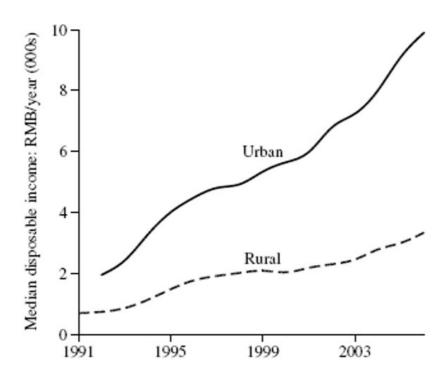


Figure 2. Increasing income inequality between urban and rural China (Source: Federal Reserve Bank of San Francisco)

A similar conclusion is drawn by considering the evolution of the share of income earned by the top 1%, as shown in Figure 3 in several countries.

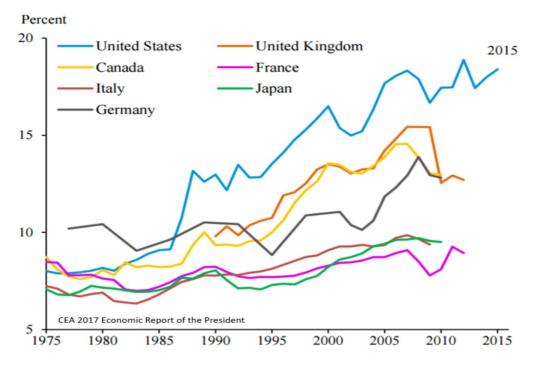


Figure 3. Share of Income earned by the Top 1 percent, 1975-2015 (Source: World Wealth and Income Database)

The dynamics of income inequality is even clearer when looking at the comparison between the evolution of different income groups in the USA as Figure 4 does.

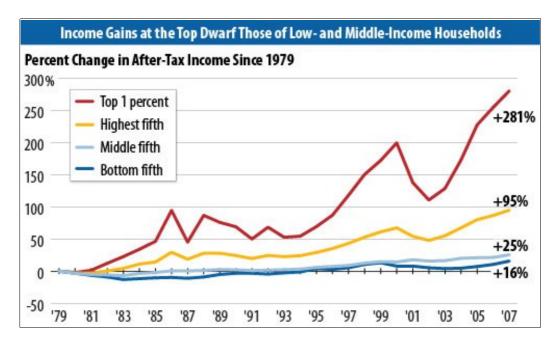


Figure 4: Income gains of the top 1% compared to low and middle-income households (Source here)

Nothing changes considering wealth, with a rise in inequality in the United States, only temporarily interrupted by the global financial crisis from which only the richest 10% of families has recovered fully and has kept increasing (see Figure 5).

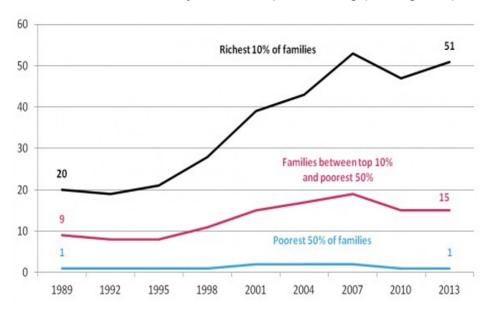


Figure 5. Holdings of U.S. family wealth (trillions US\$)

The effects of the different phases of globalization⁷ on inequality in the United States appears clearly also from Figure 6.

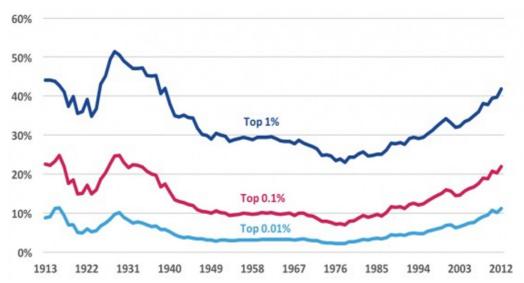


Figure 6. Wealth shares in the USA, 1913-2012 (Source: here).

An additional, rather striking finding is that in 2007 the richest 10 percent of the US population controlled 2/3 of American wealth.

As we have already discussed, if we look at *global* inequality, the fact that countries like China and India have been growing over the last 20-30 years has implied its reduction, as shown by Figure 7.

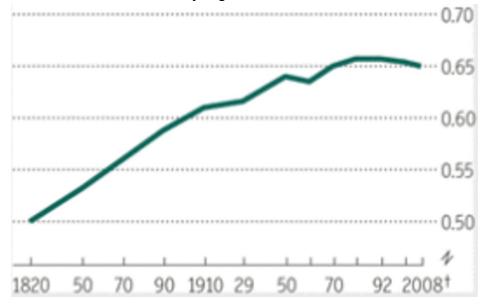


Figure 7. Global inequality, Gini coefficient

(Sources: The World Top Incomes Database; World Bank: Inequality among World

⁷ See Della Posta (2018) for a discussion of the different phases of globalization.

Citizens, 1820-1992", by Bourgouignon and Morisson, 1992, The American Economic Review, 2002; "A short history of global inequality: the past two centuries", by B. Milanovic, Explorations in Economic History, May 2011).

1.4. Explanations of different economic inequalities

What explains the surge of economic inequality (income or wealth) within countries and the relatively better result of both between countries and global inequality over the past decades?

The surge in both income and wealth inequality that has been characterizing the past decades is due to several factors.

A leading role is played by technological developments, increasing returns to scale, imperfect competition and the resulting growing monopolies (it is sufficient to think about Microsoft, Amazon, Apple, Facebook or Alphabet, parent company of Google).

A second reason is to be found in the economic globalization and the different labor division at a world level, also dramatically affected by the technological developments mentioned above.

A third explanation, but certainly not in order of importance, lies in the reduction of distributive policies that have been characterizing the neoliberal revolution (for example the dramatic reduction of the marginal tax rate in the US, UK and the rest of the world starting from the 1980s both on individuals and on companies, and the reduction or even removal of taxation on inheritance in many countries) (See Figures 8 and 9).

Moreover, in developed countries, over the same period, protection has kept being granted to many liberal professions, for example regulating strictly the access to those professions or allowing them to fix the price to be paid for their services, rather than allowing it to be determined by market forces. It should be noticed that the protection assigned to those sectors was in stark contrast with the competition at the world level that unskilled workers have been exposed to, in spite of the fact that professionals are usually already protected because the services they supply are in most cases non-tradable, therefore not subject to international competition.

What all this means is that inequalities have not emerged because of individual efforts, merits and hard work, in an environment in which the state guarantees the conditions for a fair competition between individuals. On the contrary, such inequalities are the result of precise policies aimed at protecting some groups at the expenses of others. Belonging to a given social class determines the destiny of a person (this was definitely true in the past but the evidence seems to suggest that it keeps being true today, in spite of the rhetoric according to which in most Western countries each person has full chances to be successful, if she deserves it. This may be true in some domains, in which the creativity or the physical ability is relevant – like music, shows, sports - but it is much less so in other domains in which connections and social networks still play a dominant role).

It has not been irrelevant, from this point of view, also the declining rate of union's membership exhibiting a strong negative correlation with income inequality (Piketty and Saez, 2013).

A similar observation can be made when considering the growing disparity characterizing most least developed countries vis-à-vis the developed ones: Stiglitz (2002), for example, argues that the WTO agreements signed with the conclusion of the Uruguay Round in 1994 are responsible for the losses resented by many least developed countries, thereby explaining the divergent degree of inequality between countries.

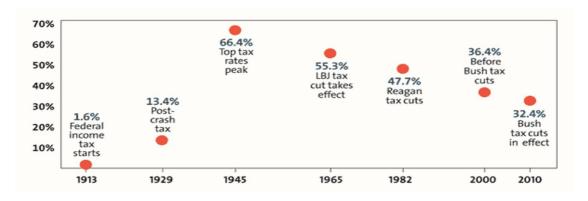


Figure 9. Effective tax rate per head of household earning equivalent of \$1 million of non-investment income in 2010 dollars

(Source: The Tax Foundation, available here)

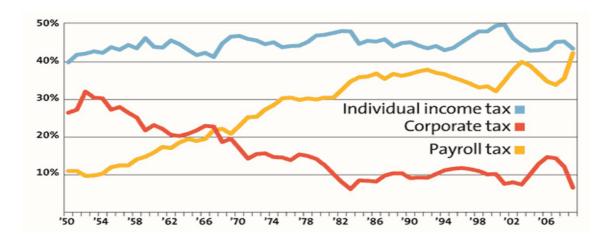


Figure 10. Share of federal tax revenue

(Source: Senate Joint Committee on Taxation, available here)

As strongly argued by Piketty (2014) a further reason for the growing inequality (both at the income and at the wealth level), has to do with the fact that capital has been rewarded at a rate (r) which exceeded the rate of growth of the economy (g), namely: r > g.

This has become relevant with the liberalization of capital movements reintroduced starting in the 1970s-1980s⁸.

2. The effects of economic inequality on conflicts

2.1 Does economic inequality within countries determine conflicts?

Already Plato identified the very intuitive association between economic inequality and conflicts: "We maintain that if a state is to avoid the greatest plague of all — I mean civil war, though civil disintegration would be a better term — extreme poverty and wealth must not be allowed to arise in any section of the citizen-body, because both lead to both these disasters" (Plato, cited in Cowell 1985:21 and reported by Cramer, 2005)⁹.

Aristotle also dealt with the same theme as reported in the article of De Soysa and Vadlamannati in this Thematic Issue. His focus, however, seemed to be more on poverty than on inequality, as he explicitly acknowledged by

⁸ We should not forget that under Keynesian policies international finance was believed to be a critical component of the economy that needed to be constrained.

⁹ Cramer (2005) provides and exhaustive literature review, referring, among others, to Collier and Hoeffler (1998), Midlarsky (1988), Mitchell (1968), Muller and Seligson (1987), Nagel (1974). Parvin (1973), Russett (1964).

suggesting that a reduction of wealth inequality would not necessarily produce large gains in the reduction of conflicts.

In the French revolution the word "egalité" gained prominence together with, "liberté" and "fraternité". This would suggest that one of the motivations of the French upheaval was precisely the presence of inequality (although the term might also refer to political, and not only social and economic aspects, Alacevich and Socci, p. 37). Zamagni (2009) also argues that global inequality may cause serious conflicts and may increase the risk of upheavals and civil wars.

Fajnzylber et al. (1998), Hsieh and Pugh (1983) and Kennedy et al. (1998) all find in cross-sectional studies that increasing income inequality raises violent crime rates.

Wilkinson and Pickett (2009) show that inequality is highly correlated, among many other social indicators, with crimes, homicide rate and imprisonment rate. When inequality increases, the social distance between groups increases too (consumption, housing, health, living standards), thereby increasing social stratification and creating the ideal conditions for conflicts.

Alesina and Perotti (1996) (cited by Nafziger and Auvinen, 2002) in their cross-section study of 71 developing countries for the period 1960-1985, find that income inequality was associated with social discontent and sociopolitical instability (measured, for example, by the incidence of political assassinations), which in turn induce lower investment and lower growth. The recent Arab Spring in Tunisia, Egypt, and Libya seems to provide an additional instance in which income inequality is accompanied by conflicts and instability. This would suggest that once a given critical threshold is overtaken, then conflicts are inevitable.

Some studies also argue that within country inequality implies inefficiency, since it determines higher unproductive expenses on guards and security: given the relatively less safe environment, people would tend to live protected by fences and walls since security would not be guaranteed otherwise. This also suggests then, that inequality produces a more conflictual environment in which the security of people is at risk (Jayadev and Bowles, 2006).

However, in spite of large inequalities, people who are starving do not always "take the rich by the throat or set fire to their houses" (Montaigne 1981:119 as reported by Cramer, 2003). This must mean that inequality – at least up to a

given threshold - may well be accepted as a natural fact or that the power and repressive strength accompanying it are such that the situation cannot be overturned, or still that for some reasons collective action may not take place.

As a matter of fact, empirical evidence does not always confirm the intuitively plausible correlation between inequality and violent conflicts (Cramer, 2003). Lichbach (1989) observes that no theoretical progress is made on this issue and still Cramer (2003) argues that the limited theoretical connection between inequality and conflicts has to do with the limited interest that the former receives in neoclassical economics: "greed" prevails over "grievance".

Hirschman (1981) explains the rather common lack of violence and conflicts in presence of inequality with a "tolerance" for it, induced by the hope that the observed higher incomes enjoyed by a part of the population provided evidence of social mobility, so that the same possibility would be given to the remaining part. This is in line with the idea that conflicts originate from a lack of *equity*, rather than a lack of *equality*. When inequality is perceived as resulting from "fair" premises would be easily accepted. What might not be accepted, instead, is the lack of *equity*, namely the lack of an equality of opportunities.

It is also possible that economic inequality followed an inverted U curve shape: it would cause an initial increase of social conflicts, but once a given level is reached without solving the problem, the lack of coordination among opponents, or the expectation that the repression operated by the leading group cannot be overturned may prevail, thereby reducing the degree of social conflicts for even higher levels of economic inequality.

According to Collier (2000) inequality is simply not a significant causal variable in the origin of conflicts: "Inequality does not seem to affect the risk of conflict. Rebellion does not seem to be the rage of the poor. ... Conflict is not caused by divisions, rather it actively needs to create them" (pp. 10–11).

Weede (1987), among others, also gives evidence of the argument according to which there is no meaningful relationship between political conflict and inequality.

A final point here is to note that, historically, inequality varies very little and very slowly, and yet violent conflicts and political violence appear to fluctuate more widely. Hence, at the very least, inequality must be insufficient to explain conflict

and it is not even clear whether it should be a necessary condition.

Such an array of hypotheses and claims might appear as frustrating, although it is rather common in many discipline to have opposite views on the same subject. According to Lichbach (1989) the authors of different studies on the relationship between economic inequality and conflicts do not read one another and monologues, rather than a dialogue, prevail. As an evidence of this he argues that "for example, students of black protest in the United States and of conflict crossnationally have both been concerned with the EIPC (*Economic Inequality – Political Conflict*) nexus, yet both have neglected each other's work" (p. 436)¹⁰.

Economic inequality can be held responsible for different kinds of conflicts and instabilities including economic and financial ones: Cramer (2005) recalls that Marriner Eccles, the Chairman of the Federal Reserve during the Great Depression, identified wealth inequality as the main culprit of the crisis: "A giant suction pump had by 1929-1930 drawn into a few hands an increasing portion of currently produced wealth. In consequence, as in a poker game where the chips were concentrated in fewer and fewer hands, the other fellows could stay in the game only by borrowing. When the credit ran out, the game stopped." A similar story seems to characterize also the recent global financial crisis. Economic inequality implied the need for those lagging behind to raise debts in order to keep up with the richest ones (Galbraith, 2012). Such debts, as soon as interest rates increased, turned out to be excessive and determined the economic crisis, which certainly represent a source of instability and conflicts.

Within countries inequality may also determine a reduction of the degree of trust among citizens. In turn, such a reduced trust, by undermining the social capital of the country, contributes to create the favorable conditions for conflictual situations. The relationship between inequality and social capital is discussed in the next Section.

2.2. Within countries inequality and social capital

The "ultimatum game" clearly shows how the lack of a common, shared ideal of fairness and justice may produce open distributive conflicts ending up in a Pareto inferior equilibrium. In the "ultimatum game" (Güth, Schmittberger, & Schwarze, 1982) one player has to share a given amount of money with a second player. The former proposes a given division and the second player may accept or reject. In the latter case both players will receive nothing. Of course,

¹⁰ Some interest in the connection between economic inequality, violent crimes and civil war appears also in the World Bank's website.

rationality would suggest that it would be sufficient for the first player to assign to the second one a sum which is above zero in order to secure her approval. Experimental evidence, however, contradicts this conclusion and one possible explanation is certainly that some "aversion for injustice" characterizes the second player only, so as to determine a distributive conflict between the two players, resulting in a Pareto inferior conclusion (namely a situation in which both of them get zero, compared to a situation in which both of them would obtain a positive – although unequally shared – amount of money)¹¹.

The "aversion for injustice" emerging in the example above suggests that economic inequality may produce effects that undermine trust and social cohesion, thereby affecting negatively "social capital". Let us define social capital with the help of Figure 11.

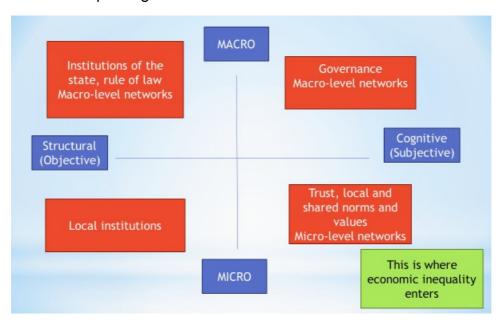


Figure 11. Dimensions of social capital

Social capital reflects the quality of both institutions and relationships of a community and it is therefore an immaterial variable, that may be identified with both structural (objective) and cognitive (subjective) elements, both at the

¹¹ Other explanations are possible, based on the observation that the second player may reject the offer of the first player when the conditions for following a rational behavior are not satisfied (sobriety vs. intoxication); when the second player inflicts some sort of ethical punishment on the first one for her misbehavior and in order to educate her for future actions (altruistic punishment); or when considering that it is the expected utility from money and other relevant variables that matter rather than the amount of money per se. This includes the sense of fairness that one would like to be respected, or simply the fact that the little sum which is proposed, although greater than zero, is so low that it does not increase the expected utility of the recipient.

macro and at the micro level.

Among the cognitive-micro indicators we find, for example the quality of personal relationships, including "bridging" – namely connecting - social networks and safety nets, which are negatively affected by social comparisons and therefore by economic inequality¹².

Since economic inequality undermines such social networks, it reduces the degree of trust, preventing the sharing of the common objectives to be pursued, without which the economic performance of a country can be seriously threatened. Economic inequality, then, paves the way to distributive conflicts arising in order to appropriate the available resources. Wilkinson and Pickett (2009) show that economic inequality is negatively correlated with quality-life social indicators like trust and therefore social capital.

In unequal societies citizens may not support government spending because they believe that it will only benefit elites. On the contrary, a lower economic inequality strengthens social ties and causes a more peaceful and stable social environment and this in turn reduces the free riding behavior that would undermine the provision of public goods. Different levels of social capital, then, help explaining why it is the case that exactly the same reform is successful in one country and fails somewhere else (as in the cases of Northern and Southern Italy analyzed in the seminal contribution of Putnam, 1993)¹³.

Economic inequality, then, has to be avoided not only (or not necessarily) for ethical or generic reasons of 'social justice', but mainly to avoid the negative consequences on social capital and conflicts that it may produce.

Loungani (2003) also observes, reporting the position of Paul Krugman and others, that a high degree of inequality may favor the creation of oligarchies that may be only interested in pursuing their own success, rather than favoring the balanced development of the societies they live in. This also means that economic inequality may reduce the quality of democracy, given that rich people will tend to tilt the political and economic conditions in their favor and oligarchies can emerge. In such a situation the quality of democracy worsens, because a

¹² Social capital, however, may also have *bonding* – rather than *bridging* – features. In such a case the connections are limited to a close circle of friends of families, leaving out the rest of people. Bonding social capital, then, further strengthens economic inequality.

¹³ Acemoglu and Robinson (2008) refer to this point with the expression "invariance principle", explaining with the lack of social capital why reforms often fail.

large part of citizens will not be pleased with the way things go for them. This increases their sense of frustration, implying once more a deterioration of social capital, and in the end a whole range of possible answers can emerge, including populism, which is the phenomenon we are observing in this period and whose roots, among several others, may then be traced back to economic inequality¹⁴. This is a rather contentious conclusion, though. As a matter of fact, in trying to interpret the reasons of its diffusion, it has been observed that populism does not necessarily arise in situations in which economic inequality is present, but rather in contexts in which culture, perceptions of being left behind, status anxiety, fears (no matter whether justified or not), age, marginalization and physical distance from areas of prosperity or just a generalized unhappiness, matter more than economics.

A further issue is whether wealth inequality, rather than income inequality, would be the driving force of populist conflicts and in the end of the deterioration of the quality of democracy (Alevich and Soci, 2017). From this point of view, it can be argued that housing can have been a leading factor in creating generational wealth inequality, given that home owners — typically older people - had benefitted from asset price inflation, which had largely damaged young people. Given the role of interest rates in affecting wealth and the price of assets, then, it is an open question whether low interest rates may have increased economic inequality by increasing the value of wealth due to the negative relationship between the two, or may have reduced it, given that low interest rates also help reducing unemployment and rents from savings as Piketty (2001) has strongly argued.

2.3. Cross-country inequality and conflicts

In the previous section we have addressed the possible relationship between within countries inequality and (internal) conflicts (erosion of social capital, security in urban and rural areas, violent crimes, social unrest, civil wars and revolutions, political assassination, the deterioration of the quality of democracy and so on).

Let us turn now to the effects of cross-country inequality on conflicts.

A first obvious, although indirect, conflict emerging from *cross-country* inequality

¹⁴ See Fadda and Tridico (2017) and Center for European Reform (2016) for the connections between economic inequality and populism.

is represented by migrations: when moving from their own country of origin to a (richer) country of destination, migrants hope to have the chance to increase their own income, given the large difference in the average income between the two countries, and the resistance of host countries with respect to migrants. It is easy to observe that migration is induced precisely by cross-country income inequality.

Migrations (and the fear of them) often induces the opposition of the people living in the countries of destination. Such a resistance can be explained by the severe social conflicts migrations may generate, as the current situation clearly shows. As a matter of fact, according to Putnam, the inflow of migrants within a country induces "ethnic diversity" which would risk destroying the social cohesion of a community, therefore undermining its social capital (Putnam, 2000).

The relational component of social capital may have both *bonding* and *bridging* features. *Bonding* social capital is the one characterizing closed circles and networks, thereby only favoring those who belong to that circle. No surprise that migrants may risk undermining such relationships (although it could also be claimed that the perceived threat of migrants may strengthen the network, as the current success of populist movements may suggest).

As far as *bridging* social capital is concerned, however, migrants may actually improve it, for example by raising the sense of solidarity in large sectors of the population. Similarly no problems arise from migrants when they integrate in the host countries exhibiting a complementary rather than substitutive nature (it is sufficient to think that no threat from ethnic diversity is perceived when migrants work as elderly care takers, manual workers in physically demanding jobs or the like).

Abascal and Baldassarri (2015) use the same database used by Putnam (2007) and get an opposite conclusion as to the effects of "ethnic diversity" on social capital and potential conflicts. As a matter of fact – to simplify quite substantially their argument - they show that it is not ethnic diversity per se that matters, but rather the income of migrants: if white *poor* people were to move to a mostly white and wealthy neighborhood they would be equally undesired and regarded with suspicion, while if non-white but high-income new comers were to settle down no issue of ethnic diversity would be raised against them by their neighbors. An additional consequence of *cross-country* (and *global*) inequality has been identified with international terrorism. After all the Doha Round of negotiations within the WTO started just after the terrorist attack to the Twin Towers, with the

clear intention of providing some better development opportunities to least developed countries, with the implicit argument that the attack had been motivated by the unequal economic conditions in different parts of the world. When poor countries confront themselves with rich countries and when no chances are perceived to escape from the initial condition of poverty and deprivation, then it is likely that some forms of extreme reaction may take place (by taking this argument to its extreme, then, in the absence of economic development opportunities, migration may be interpreted at least as a peaceful alternative to armed conflicts or international terrorism).

An additional, possible connection is the one between economic inequality and wars, although in this case it might well be that the sense of frustration of the poorest countries will have to face the military superiority of the richest ones, so as to make war more difficult.

So, according to what precedes, it might be tempting to draw a simple proportion, namely that civil war is to *within countries* inequality like international terrorism or war is to *between countries* inequality. Needless to say, however, such a proportion is far too simple to be true. As we have discussed above, the correlation between *within countries* inequality and social unrest is far from uncontroversially proved and the same is true for the correlation between *cross-country* inequality and international terrorism or war.

More research is needed to unravel and better qualify these possible correlations.

Concluding remarks

In this paper I have discussed the correlation between economic inequality and conflicts. In order to do that I have first defined what is meant with economic inequality and how it can be measured. I have then presented the data, suggesting that over the past decades within countries inequality has been increasing together with the inequality between developed and least developed countries (while the positive aggregate performance of China and India has stabilized the degree of inequality between developed and developing countries). I have then reported some of the standard explanations for the recent increase of economic inequality.

In discussing the relationship between economic inequality and conflicts, I have distinguished between the conflicts originating from within countries inequality and those originating from the inequality across countries. Inequality within countries can be considered as responsible, among other things, for social unrest, civil wars, violent crimes and in more general terms for the erosion of trust and social capital, with the result of increasing the potential for conflicts within a country. This relationship, however, is far from linear and far from accepted in the literature. As a matter of fact, several authors argue and suggest that there exist a sort of "tolerance" for inequality that might have several explanations, including the discomforting feeling that nothing can be done to overturn it.

The same can be said for the assumed correlation between cross-country inequality and international terrorism. International and inter-continental migrations are also considered a result of *cross-country* inequality, although also in this case it might well be that migrations do not take place in spite of economic inequality because of the limitation strongly imposed by the chosen destination countries.

References

Abascal, M. and D. Baldassarri (2015), "Love Thy Neighbor? Ethnoracial Diversity and Trust Reexamined", *American Journal of Sociology*, 121(3), pp. 722-782.

Acemoglu, D. and J. A. Robinson (2008), "Persistence of Power, Elites and Institutions", *American Economic Review*, 98(1), pp. 267-93.

Alacevich, M. and A. Soci (2017), *Inequality: A Short History*. Brookings Institution Press.

Alesina, A. and R. Perotti (1996), "Income distribution, political instability, and investment". *European Economic Review*, 40(6), pp. 1203-1228.

Bairoch, P. (1982), "International Industrialization Levels from 1750 to 1980." *Journal of European Economic History* 11, pp. 269–333.

Bonaglia, F. and A. Goldstein (2008), *Globalizzazione e Sviluppo*, 2/e. Bologna: Il Mulino.

Brandolini, A. (2001), "Disuguaglianza e povertà", Chapter 18 in Brucchi (2001).

Brucchi L. (2001), *Manuale di Economia del Lavoro*, Bologna: Il Mulino.

Collier P. (2000) "The Economic Causes of Civil Conflict and Their Implications for Policy, Economics of Crime and Violence", *The Economics of Conflict*, World Bank, June 15.

Collier, P. and A. Hoeffler. 1998. "On economic causes of civil war." *Oxford Economic Papers*, Vol. 50, pp. 563–573

Cowell, F. 1985. "The economic analysis of tax evasion." *Bulletin of Economic Research*, 37(3), pp. 163–193.

Cramer, C. (2003), "Does inequality cause conflict?", *Journal of International Development*, Special Issue: Explaining Violent Conflict: Going Beyond Greed versus Grievance, 15(4), pp. 397-412.

Cramer, C. (2005), Inequality and Conflict A Review of an Age-Old Concern, United Nations Research Institute for Social Development, Pragramme Paper 11.

Das, D. K., (2003), *The Economic Dimensions of Globalization*, Houndmills: Palgrave Macmillan.

De Grauwe, P. (2009), "Some notes on globalization" in Della Posta, P., M. Uvalic and A. Verdun (eds) (2008) *Globalization, Development and Integration*: *A European Perspective*, Basingstoke: Palgrave Macmillan.

De la Dehesa, G. (2006), *Winners and Losers in Globalization*, John Wiley and Sons.

Della Posta, P. (2018), *The Economics of Globalization: An Introduction*, Pisa: ETS.

Fadda, S. and Tridico, P. (eds.) (2017), *Inequality and Uneven Development in the Post-Crisis World*, Routledge.

Fajnzylber, P., Lederman, D., & Loayza, N. (1998). *Determinants of crime rates in Latin America and the world: An empirical assessment*. Washington, DC: World Bank.

Güth, W., Schmittberger, R., & Schwarze, B. (1982), "An Experimental Analysis of Ultimatum Bargaining". *Journal of Economic Behavior & Organization*, 3, pp. 367-388.

Galbraith, J. K. (2012), *Inequality and instability. A Study of the World Economy just Before the World Crisis*. Oxford: Oxford University Press

Hirschman, A.O. 1981. "The changing tolerance for income inequality in the course of economic development", in A.O. Hirschman, *Essays in Trespassing: Economics to Politics and Beyond*. Cambridge University Press, Cambridge.

Hsieh C., and Pugh, M.D. (1983), "Poverty, Income Inequality, and Violent Crime: A Meta-Analysis of Recent Aggregate Data Studies", *Criminal Justice Review*, 18(2), pp. 182-202.

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Jayadev, A. and S Bowles (2006), "Guard labor", *Journal of Development Economics* 79(2), pp. 328-348.

Kennedy, B. P., Kawachi, I., Prothrow-Stith, D., Kimberly Lochner, Vanita Gupta, V. (1998), "Social capital, income inequality, and firearm violent crime", *Social Science & Medicine*, 47(1), pp. 7-17.

Lichbach, M. (1989), "An Evaluation of 'Does Inequality Breed Political Conflict?" Studies. *World Politics*, 41(4), pp. 431-470.

Loungani, P. (2003), "Inequality: Now you see it, now you don't", *Finance & Development*, September.

Midlarsky, M.I. (1988). "Rulers and the ruled: Patterned inequality and the onset of mass political violence." *American Political Science Review*, 82(2), pp. 491–509.

Mitchell, E.J. (1968). "Inequality and insurgency: A statistical study of South Vietnam." *World Politics*, Vol. 20, pp. 421–453.

Montaigne, Michel de (1981), Essays. Penguin Books, Harmondsworth.

Muller, E., & Seligson, M. (1987). "Inequality and Insurgency", *American Political Science Review*, 81(2), pp. 425-451.

Nagel, J. (1974), "Inequality and discontent: A non-linear hypothesis." *World Politics*, Vol. 26, pp. 453–472.

Nafziger, E. W., and Auvinen, J. (2002). Economic development, inequality, war, and stateviolence. World Development, 30, 153-163

Parvin, M. 1973. "Economic determinants of political unrest: An econometric approach." *Journal of Conflict Resolution*, Vol. 17, pp. 271–296.

Piketty, Th. (2014), *Capital in the Twenty-First Century*. Cambridge (MA): Harvard University Press.

Piketty, T. and E. Saez (2013), "Top Incomes and the Great Recession", IMF

Economic Review, 61(3), pp. 456-478.

Putnam, R. D. (1993), *Making Democracy Work: Civic Traditions in Modern Italy*. Princeton, N.J.: Princeton University Press.

Putnam, R. D. (2000). *Bowling Alone: The Collapse and Revival of American Community*. New York: Simon & Schuster.

Putnam, R. D. (2007), "E Pluribus Unum: Diversity and Community in the Twenty-First Century. The 2006 Johan Skytte Prize Lecture". *Scandinavian Political Studies*, 30(2), pp. 137–74.

Russett, B.M. (1964), "Inequality and insurgency: The relation of land tenure to politics." *World Politics*, Vol. 16, pp. 442–454.

Sala i Martin, X. (2002a) "The Disturbing 'Rise' of Global Income Inequality," *NBER Working Paper* 8904.

Sala i Martin, X. (2002b), "The World Distribution of Income (Estimated from Individual Country Distributions)," NBER Working Paper 8933.

Shaikh, A. (2007), "Globalization and the myth of free trade" in Shaikh, Anwar (ed), *Globalization and the Myths of Free Trade*, Oxon: Routledge, pp. 50-68.

Stiglitz, J. (2002), Globalisation and Its Discontents, London: Penguin

Targetti F. and A. Fracasso (2008), *Le sfide della globalizzazione. Storia, politiche e istituzioni*. Milan: Brioschi.

Weede, E. (1987), "Income Inequality, Average Income, and Domestic Violence". *Journal of Conflict Resolution* 25, pp. 639 –53.

World Bank (2002), *Globalization, growth and poverty: building an inclusive world economy*. New York: Oxford University Press.