Income and Earnings Inequality as a Global Challenge Boomerang

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Abstract

Throughout history there has always been inequality in income distribution, which, depending on the organization of the economic system was more or less expressed. In this paper we used Gini coefficient as a measure of inequality of the total income. Gini coefficient shows increasing stratification of people on the issue of economic inequality, for example in many OECD countries income inequality remained at record-high level despite declining unemployment. In the 90 countries economic situation is worse than 10 or 20 years ago, and more than 1.5 billion people live on less than 1$ a day. Within the overall wage distribution there are also pay gaps between different groups of workers. One of them is the gender pay gap, which shows the percentage shortfall in the average wage of women relative to the average wage of men at all hierarchical levels in the organization, especially for male CEOs who earn twice as much as their female counterparts. According to 2014 survey in 44 countries revealed that inequality between rich and poor is seen as a "big problem" by a majority of respondents in all countries, and as a "very big problem" in 28 countries.

Through this paper we evaluated different forms of inequality among workers as an issue that continues to climb up the global policy agenda in recent years. We examined how characteristics of workers affect income inequality. Also we analyze income inequality among different regions. We came to conclusion that reducing wage inequality requires not only building up the skills of workers, but also the introduction of measures that can reduce the inequality in average wages within enterprises.

The paper proposes some of the possible policy options, and examine how they may affect inequality within enterprises such as minimum wages and collective bargaining, top salaries and other measures to reduce inequality like fiscal policies and policies that affect wages and wage distribution indirectly.

Keywords: income, inequality, earnings, Gini coefficient, Global economy
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1. Introduction

Global income inequality has long been a subject of study of many economists in the world. Inequality has always been the main reason for criticizing the existing economic and political order. Under inequality is considered uneven distribution of income within a society where the greater part of the revenue goes to richer population. Increasing the income gap between rich and poor could lead to major earthquakes in the country in the form of revolution and conflict which is why this problem, as we have already said, attaches great importance.

Observed globally, comparing advanced and developing countries it is found that most countries – with the exception of Latin America and part of Sub-Saharan Africa – experienced decreasing inequalities from the 1950s to the 1970s, with a new rise since the 1980s. Such a growth was particularly marked in post-Socialist countries of Eastern Europe, while a moderate rise is found since the 1980s in Asian economies and in most Latin American countries. In the largest Asian countries – China and India – a complex pattern has emerged, with rapidly rising incomes – and inequalities - in urban areas and a modest rise of incomes – and inequalities - among rural population.

In almost all EU countries has been an increase in inequality in the 1980s. Such an increase has been particularly strong in Finland, Norway, Germany, Portugal and Italy, as well as in the US.

Inequalities in income are the result of the overall relationships between capital and labour and of changes taking place in production systems, labour markets, social variables and in the redistributive activity of the welfare state. They are also the result of the unequal distribution of salaries between different groups of workers, workers with different characteristics, but also of region where people live as one of the reasons for failure to achieve greater income. Through our paper we will deal with all of these problems and offer some of the policy options as a possible solutions.

2. Gender pay gap

One of the most important determinants of economic and social progress is a good economic status of women in the labor market. It is crucial to work on the reduction or complete closure of the gender gap in earnings. A key prerequisite that provides the opportunity to members of both sexes to make their own choices and have control over their lives is economic independence and the main way to achieve it is through the acquisition of profits.

The phenomenon of discrimination is explained by differences in earnings arising from personal characteristics such as gender, race or religious affiliation. Differences in earnings between men and women are one of the most common forms of manifestation of discrimination in the labor market, in addition to discrimination in employment, professional advancement and others. Laws labor legislation in most market economies today guarantee equal remuneration for work of equal value, but nevertheless, the presence of the gender gap in wages is more than obvious and common.

Gender gap in earnings represents the difference between the average (gross) earnings of men and women wage per hour of work, on the level of the whole economy. It is classified as one of the most important indicators that indicates the degree of women's access to economic opportunities. Its presence is classified as firmest features of the labor market, and he carries a good deal of many other inequalities between the sexes in the labor market.. This primarily refers to the traditional women's greater participation in family responsibilities and the inability to establish an efficient balance between private - professional life. "The division of responsibilities at home is a highly gender, with women who do most of the housework, caring for children and dependent adults." (Apostolova, 2010) The presence of gender discrimination is noticed in the provision of benefits to employees by employers, while women occupy a large percentage of disadvantage. The benefits thoughts on life and health insurance, housing conditions, paid sick leave, annual leave or care of dependents or a sick household members, paid tuition or other costs related to education, training and professional development, as well as the possibility of using official vehicles , obtain compensation for lunch and enjoy other benefits.

Gender pay gap is usually a result of violating the principle of equal pay for work of equal value, where work of equal value is considered as work that requires the same level of responsibility, expertise, experience and readiness in the intellectual and physical sense. In convention No. 100, adopted back in 1951, the International Labor Organization (ILO) strictly prescribed the prohibition of all forms of discriminatory behavior in the provision of compensation for the work in terms of gender. This convention was ratified in 2006. in more than 160 countries worldwide. It has established the obligation of every state to establish such a system (through legislation and/or collective agreements) to prevent any attempt of different remuneration of women and men for work of equal value. This principle is considered as one of the leading (international) when establishing a major gender equality is concerned.

For better understanding the nature of the gender pay gap it is necessary to examine the connection that gap has with systemic discrimination. It is necessary to consider whether there are some differences in the level of fees for work of equal value, which predominantly performed by women, compared to jobs that often do men. If the statistics indicate the presence of a difference in the amount of wages for performing the same or two different jobs of equal value, the employer has to prove that this difference in fees are not due to gender discrimination.

2.1. Causes of the gender pay gap

The presence of the traditional division of gender roles in the labor market means that communities and society have expectations, in accordance with the adopted gender stereotypes, about the role of women and men solely on the basis of gender criteria.. In this sense, women are expected commitment and care for the family, and men are expected for decision-making positions in society and cares about "feeding" families. These gender roles are formed even at an early age (the female character in the books is often presented as a mother, and a figure of a man in the role of some of the professions) and they strongly influence on further choices of men and women in terms of education and future career choice and attitude towards work forms that await them. In other words, since childhood, men and women are prepared and learn to accept the role in society that they belong to the tradition. Gender stereotypes do not lose their influence and dominance of the past, in the sense that their influence on the formation and modeling the behavior of women and men is still very significant.

The gender pay gap is the result of the existing segregation in the labor market, which is manifested through the work of men and women in different sectors and at different jobs. We distinguish sectors of the labor market where women, as the labor force, are very dominant. Most often it comes to the service sectors and care sectors (health, education, catering, public administration). Jobs in these sectors are called "women's jobs" and are less valued and lower paid in relation to the tasks that are considered so "male jobs" for the dominant share of men in employment structure. The lower valuation and lower paid jobs held by women in relation to jobs held by men, is present even within the same sector and/or within the same company.

In order to coordinate their occupational and family responsibilities, women often themselves choose jobs and sectors within which will be able to work part-time and activities that are compatible with their family responsibilities. The result of such a choice is the acceptance of jobs with low wages and poor opportunities for professional advancement and reaching managerial positions. The pay gap is visible at category of women who have children and who work part-time. Women spend more hours per week doing unpaid work (related to the care of the household, children and the elderly and/or sick household members) compared to men. According to Wirth (2001) two-thirds of women's work falls into the category of unpaid work, and only one-third of the labor of men not paid. Men absent in a small percentage from work due to illness of children or other dependents. They make up the majority when it comes to work at job of 60 or more hours a week, but, on the other hand, if we look at the time women spend working during the week, where we think of paid and unpaid work together, women lead compared to men.

As already mentioned, skills and work competencies of women are often underestimated in the labor market, particularly in sectors and activities in which female workforce represents a majority. This is directly reflected in the fact that women are paid less than men. For example, we have an often situation that the cashiers are paid less than men working in a warehouse in the same supermarket, although both works can be qualified as physical labor that require the same level of skills and education.

The reasons for undervaluation of women's work skills should be sought in the prejudices that they reflect "feminine" characteristics of the work, not the actual qualifications and work competencies that a woman has. For example, a nurse and medical technician often have different earnings, although the work they do require almost identical job skills and qualifications. This can be explained only by gender bias in determining salaries and underestimation of women's work.

Despite progress in the field of gender equality and advancement of women, we are witnessing a time in which women are still in the minority when it comes to their representation in politics and leadership and management structures. Studies have shown that only 30% of women in Europe are scientists and engineers. Low representation of women in senior leadership positions is present even in those sectors where women make up the majority as employees.

2.2. The benefits of closing gender pay gap

Women have skills and talents that are often exploited by employers to their full potential. Through proper evaluation of women's working skills and establishing business policy in a way that ensures women achieve balance between career and family, employers would see the benefits of women's improved business efficiency and they would attract and retain the best staff from the ranks of female labor power.

Better evaluation of employees and creating a favorable working climate, is reflected in the growth of their self-confidence leading to increased innovation and productivity at work, making the company more competitive and the superior-powered on the market, which certainly leaves the indirect positive effects on the economy as a whole.

Equality in the workplace is imperative fot the the company, if it wants to attract the highest quality workforce. A positive work environment with highly motivated employees whose work is properly valued is the key quality of work that leads to competitive advantages in a turbulent market.

Establishing equality between the sexes in terms of earnings leads to indirect benefit to society and the economy as a whole, which is reflected in a lesser degree of poverty (stops the process of feminization of poverty) and better living standards of women, both during working life, and in the period of consumption in retirement.

Troubleshooting gender gap in wages would stimulate the growth of women's employment and contribute to their greater participation in the labor market. In this way it would increase the contribution of women to family finances, which would during the period of economic (financial) crisis proved an important element of survival.

By achieving equality in qualitative and quantitative evaluation of the work of women and men we save the time and money that would be spent for resolving legal disputes caused by submission of reports due to discriminatory behavior in the workplace and because of unfair labor practices.

Closing the gender gap in wages is a key priority of the European Union from the moment of its inception until today. Bearing in mind the benefits that this brings with its closure, it is important to note that this can only be encouraged by going through the establishment of gender equality and a better use of resources and talents of women as employees. In this manner it would create fertile ground for achieving the objectives of the Europe 2020 as a growth strategy of European Union.

From the standpoint of the national economy, reducing the gender pay gap is in the hands of national governments and social partners. EU assistance is present, but the key solutions should still be developed at the national level. An important role in this process has a public opinion in the member states of the European Union.

2.3. Gender pay gap in Montenegro

The earnings of women, which data from 2013. shows , are at the level of 86,1% in comparison to men's earnings (0,7 percentage point less than men in comparison with 2011.). The worst situation is in the manufacturing industry, where women earnings barely reach 75% of male earnings. Followed by financial intermediary where women make up 75,7% of the earnings of male, mining and quarrying where women make up 77,9% of the men’s earnings and female wage earnings are also less than 90% of men's wages in retail, healthcare, state administration and social insurance and electricity, water and gas supply . Unlike 2011, when women surpassed men's salaries in agriculture and fishing, mining and quarrying, construction and in transportation, warehousing and communications, in 2013. women's wages stayed higher than men's only in agriculture and fishing (109% of men's wages), construction (105,6%) and in transportation, warehousing and communications (111,7%).

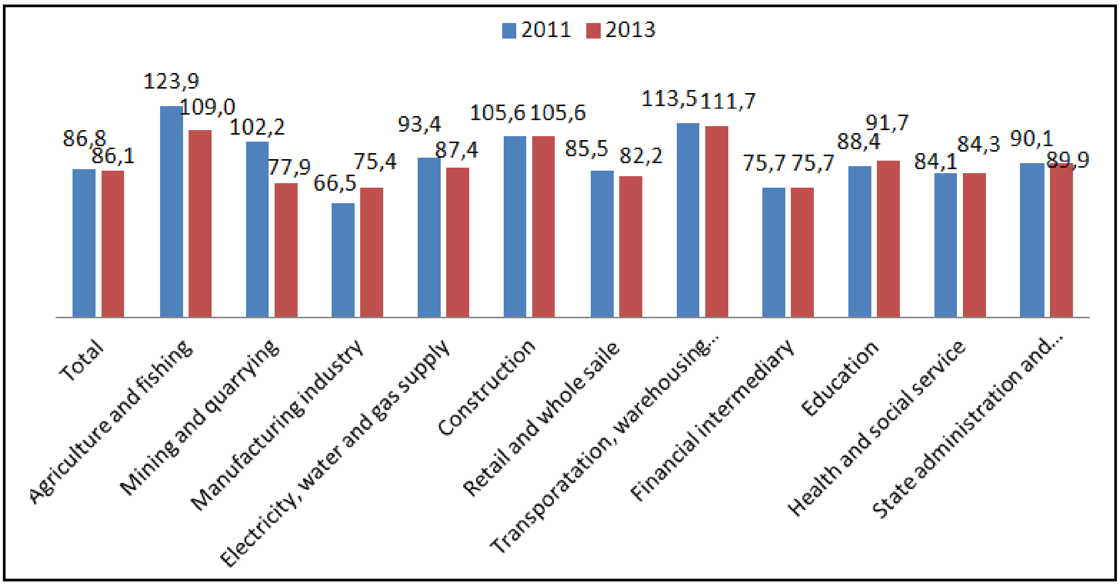

Figure 1: Gender pay gap in Montenegro

Compared to 2011, the largest increase in salaries of women compared to men is registered only in education and health and social service , while the largest decrease was registered in agriculture and fishing and mining and quarrying (more than 10 percentage points). Research of the European movement in Montenegro on gender differences in personal income and earnings showed that the difference in salaries in the category of self-employed is less than for the entire population, in which case the net average wage of women amounts to 94% of men’s salary. In addition, in this study we observed following differences:

- Women's wages make up 85.3% of men's wages in terms of experts and 82.9% when we talk about technicians and associate professionals.
- With service workers and traders this difference amounts to 78%, and with the basic elementary occupations 73%.
- In the category of officers, the average women's wages are higher than the average wages of men and make 102% of the average salary of men.

Also, when we observe men and women who work for many years in the same company, the differences in their salaries are lower than there is the case with those who have a shorter length of service with the same company. The difference in wages between men and women who work less than 2 years in the same company amounted to 15.6%, and among those who work more than 22 years in the same company the difference is 8.6% for men.

It is important to note that there is a significant difference in the structure of male and female earnings. In addition, 10% of the lowest wages make 39% of men's earnings and 61% of women's, while the situation with the highest salaries is initially reversed where the highest 10% of income makes 61% of men's earnings and 31% of female wages.

As a part of the research on gender differences in pay and income, there were tested the effects of gender, age, education, region and type of settlement in which a person lives, the length of service in the company. It turns out that the gender, after education, is the most significant factor that affects the level of income.

The study "Gender pay gap between women and men in the Western Balkans: data from Serbia, Montenegro and Macedonia" shows that there is no difference between the "unadjusted"[1] and "adjusted"[2] gap in wages between men and women and that it amounts to 16.1%. The study showed that women in Montenegro (as well as in Macedonia and Serbia) face high hurdles in entering the labor market, and must be, on average, better qualified than men to be even able to have access to jobs. In other words, while the lower and more qualified men have a job, among employed women there is disproportionately large number of highly qualified women because low-skilled women are often inactive.

This trend is opposite to one that is observed in the economies of Western countries, where employed women are on average less qualified than male employees, so that the unadjusted pay gap that exists in every EU country could be partially explained by the advantages of men in terms of education and experience. In other words, after adjustment which considers the characteristics of men and women, the gap in earnings is usually significantly reduced.

During the period, in Montenegro, on average, the unadjusted gap between men's wages and women's wages was 16% in favor of men. The unadjusted gap in Montenegro can not be explained by differences between the characteristics of men and women in the labor market (e.g., education, work experience, the characteristics of the workplace). When we consider the characteristics of men and women in the labor market, the estimated adjusted gender gap in wages is not reduced, but remains at the same level of 16%. In other words, women who have the same characteristics in the labor market as men earn 16% less, respectively, a woman would have to work an

[1] The unadjusted gender pay gap (GPG) is an important indicator used within the European employment strategy (EES) to monitor imbalances in wages between men and women. It is defined as the difference between the average gross hourly earnings of men and women expressed as a percentage of the average gross hourly earnings of men.

[2] The adjusted gender wage gap only narrows the analysis to the potential role of gender discrimination along one dimension: to differential pay for equivalent work.

additional 58 days a year to earn the same annual salary as a man with the same characteristics. Adjusted gender pay gap is usually interpreted as the result of discrimination in the labor market. When you consider the differences between the characteristics of women and men related to the labor market, we see that some of the characteristics of women in the labor market in Montenegro are better and some are worse than the characteristics of employed men. On the one hand, women often perform jobs that require more education and in regions where wages are higher (which, ceteris paribus, reduces the level of uncorrected gap). On the other hand, women often perform jobs in lower-paid occupations and work in industries where wages are lower (which, ceteris paribus, increases the level of uncorrected ego). Analysis of the different segments of the wage distribution leads to the conclusion that both adjusted and unadjusted pay gap is higher in the higher parts of the distribution yield. The wider gap at the top end of the wage distribution (20% of the highest salaries) indicates the presence of the so-called effect of "glass ceiling"[3] and that women do not perform the best-paid jobs.

The results show that during the analyzed period both adjusted and unadjusted pay gap decreased, from about 18% in 2008. to around 12% in 2011. Since the male employment rate dropped significantly during the crisis, while employment of women remained stable, reducing the gap in wages is likely a result of the changed gender structure of the participants in the labor market.

A separate analysis of private and public sector, shows that the earnings of men and earnings of women are higher in the public than in the private sector. On the other hand, the unadjusted and adjusted pay gap is wider in the private than in the public sector, which was expected because, as a rule, the distribution of earnings is narrower in the public than in the private sector (there are stricter rules on the minimum and maximum salaries because of a stronger role of trade unions and budget constraints).

Unadjusted pay gap in the private sector is 24%, and adjusted is 18% so unadjusted can be partly explained by the poor performance of women in the labor market compared to men. In the public sector the situation is reversed. While the unadjusted pay gap is in favor of men 9%, adjusted gap is 12%, which means that women working in the public sector have a better performance in the labor market than men (mainly in terms of higher education and greater participation in higher paid occupations).

The fact that the unadjusted gender gap in earnings in Western Balkan countries is lower than in Western countries is a consequence of the low representation of women (especially those with low skills) in the labor market in these countries. In other words, the higher the gap in employment means lower unadjusted wage gap and vice versa, as a rule, the biggest gap in employment occurs among those with the lowest qualifications. As the labor market is entered by more women with poor performance in the labor market, we expect that the unadjusted pay gap will become wider. If we

3 An intangible barrier within a hierarchy that prevents women or minorities from obtaining upper-level positions.

compare three countries of the Western Balkans, we see that the unadjusted gender gap in wages is most pronounced in Montenegro. Widest unadjusted gap in Montenegro may be the result of a strong tourism sector and, consequently, greater female employment in the private sector and in jobs with lower wages (from all three countries, the gender gap in employment and inactivity is the lowest in Montenegro)

3. Inequality among different regions

Our most striking result shows that income inequality in the 28 countries which are now members of the European Union has been on a unique course in recent decades. Inequality is much lower among EU citizens than in other parts of the world, and actually fell in 1994-2008.

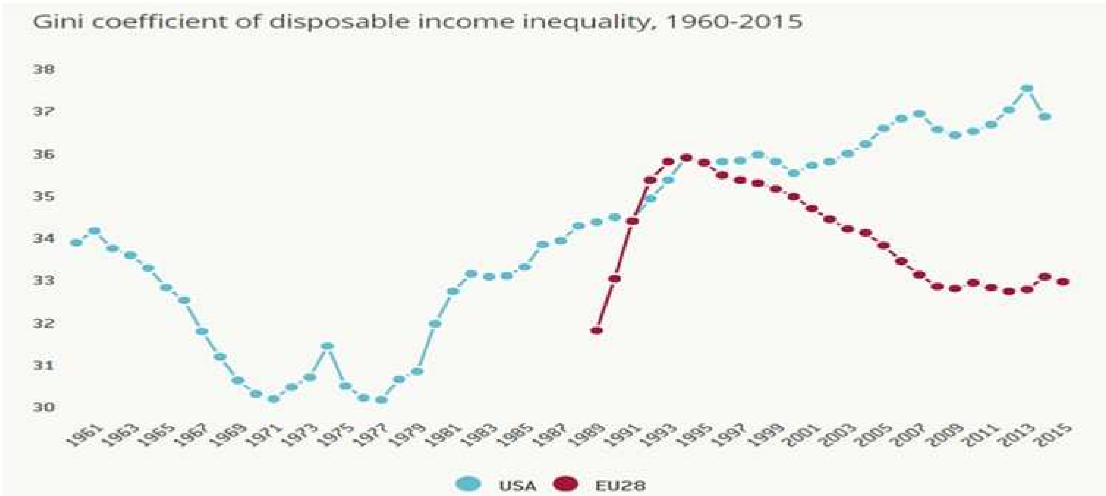

Figure 2: Gini coefficient of income inequality, USA and EU28, 1960-2015

As the figure above indicates, there was a sharp increase in income inequality among the citizens of the EU28 in 1989-93, reaching the level observed in the United States at that time.

A major reason for this increase was the massive output declines in the central and eastern European states during their transition from socialist to market-based economies. As their income declined by about a quarter or more in 1989-93, citizens in these countries became even poorer relative to citizens in western European member states, and EU28-wide income inequality therefore increased.

Nevertheless, the EU-wide Gini coefficient of income inequality in 1993 was 36, well below the 50+ values observed in Africa, Asia and Latin America.

After 1994, inequality declined steadily until 2008, since when it has remained relatively stable. In contrast, income inequality in the United States increased almost continuously from the late 1970s until 2013.

How could EU-wide income inequality decline when income inequality actually increased by more than 1 Gini point in 15 of the 28 countries in 1994-2008? One reason is that there were 7 countries in which it declined by more than 1 Gini point, and there were 6 other countries in which income inequality hardly changed.

But, more importantly, we find that the decline in EU-wide income inequality in 1994-2008 was almost entirely due to the convergence of average incomes. People in poorer regions of the EU increased their income relative to richer regions.

Unfortunately, this process has stopped with the global and European financial and economic crisis: while central European member states continue to close their gaps with the richest member states of the EU, some southern European member states, like Italy and Greece, are falling behind. Thus overall convergence within the EU was minimal in the past five years.

3.1. How unequal is inequality across the world?

In the map showed bellow, we've illustrated the latest data on income inequality around the world, as measured by the Gini index. The results are pretty revealing. Greener countries have greater income equality, according to the metric, meaning that there's less of a gap between the rich and the poor. Redder countries have more income inequality, meaning that there's a wider gap. Pink countries are about in the middle -- that includes the United States, which is the most unequal of any developed country measured.

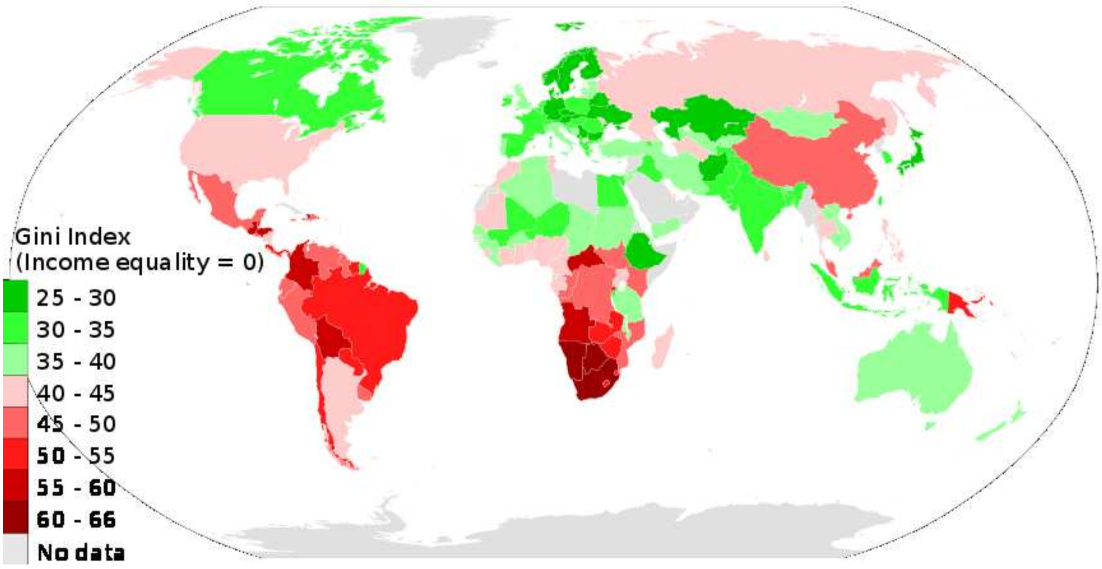

Figure 3: Countries' income inequality (2014) according to their Gini coefficients

The countries that come out looking best include, no surprise, the usual suspects of Northern Europe. Interestingly, Eastern Europe scores quite highly as well, as do some post-Soviet countries in Central Asia. Perhaps that's a legacy of Soviet-era social programs meant to flatten class divides. But it's also a reminder that, while economic equality is great, it's not synonymous with a healthy economy. Some countries are economically equal because everyone is well-off, as in Denmark, and some because most everyone is equally poor.

The countries with the highest income inequality are, by far, those of Latin America and the southern tip of Africa. These countries have been seeing economic growth over the past few decades, but much of the wealth ends up funneling into the top stratospheres of society. This problem tends to be self-reinforcing: The rich are able to secure better education and political access, making it easier for them to stay rich and tougher for everyone else to get a share of the pie.

4. How characteristics of workers affect income inequality?

Estimates of the proportions of European workers with various characteristics are shown on figures 4, 5, 6, 7, 8, averaged over decile groups, in 2010 which are latest relevant estimates.

Looking at gender, it is striking that as one moves upwards along the wage deciles, the proportion of women continuously declines. In Europe, women make up 60 per cent of the lowest-paid decile of workers, and only 20 per cent of the top 1 per cent of earners, that is shown on figure 4.

In terms of age, it is perhaps no surprise that the share of young people is greatest in the bottom part of the distribution, with only few young workers among the highest-paid 10 per cent and fewer still in the top 1 per cent Part-time and temporary workers are also over-represented at the bottom end of the wage distribution. Another striking pattern that emerges from figures is that the attributes and characteristics of those in the top decile are very similar – sometimes identical – to those of the top 1 per cent. Yet, as we saw earlier, the top 1 per cent earn much more than those in the 91st–99th centiles, which is shown on figure 5.

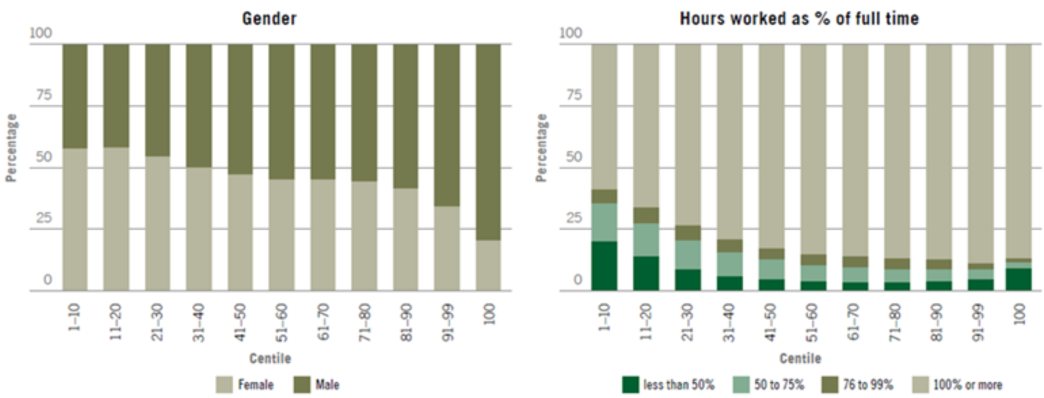

Figure 4: Gender and hours worked as % of full time, European workers, 2010

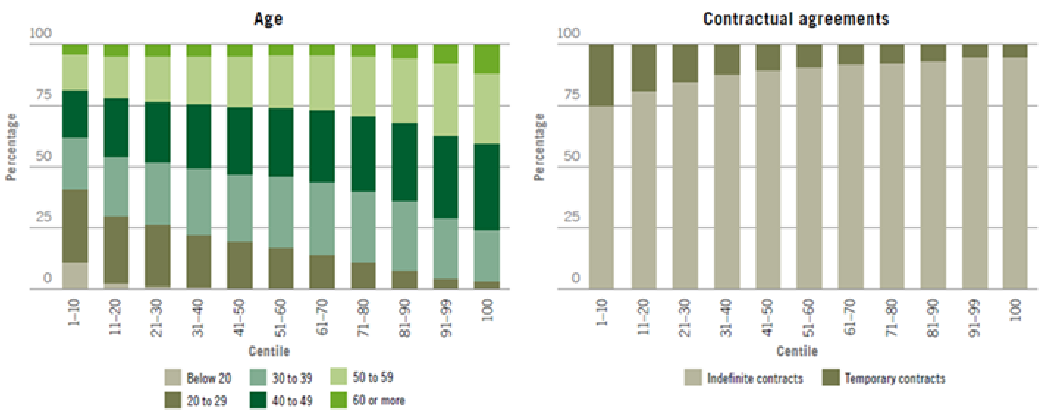

Figure 5: Age and contractual agreements, European workers, 2010

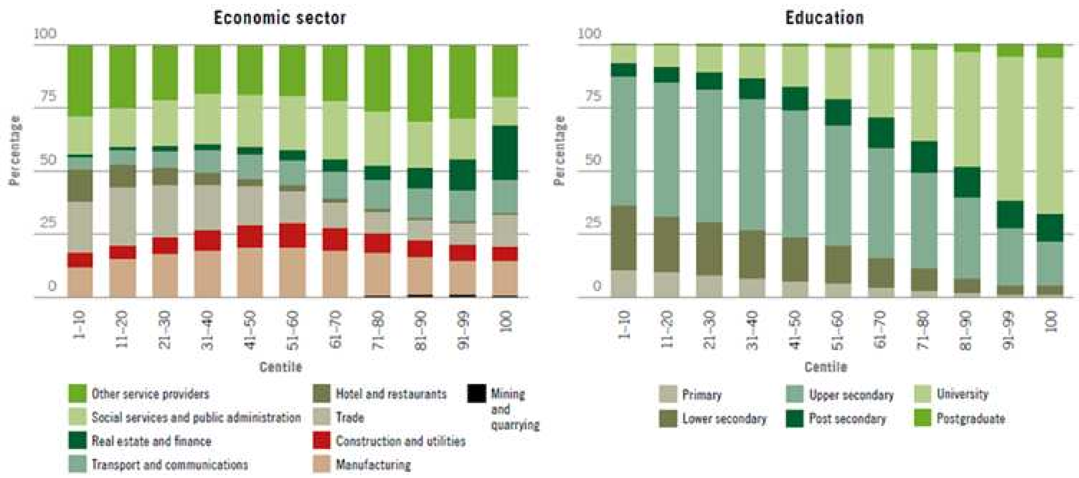

Figure 6: Economic sector and education, European workers, 2010

In terms of education, those with primary and secondary education make up the large majority of workers in the bottom 50 per cent of the distribution, while those with university degrees and higher qualifications dominate the top 10 and 1 per cent. But it is also clear that post-secondary or university education does not guarantee a highly paid job, as significant numbers of those educated to these levels can be found across the deciles. In terms of sectors, the real estate and financial sector is over-represented among top-paid workers and has few low-paid workers. Lower-paid workers are over-represented in the wholesale trade as well as in the hotel and restaurant and construction sectors. It is striking, however, that all sectors have some employees whose earnings are in the top 10 per cent and the top 1 per cent, which is shown on figure 6.

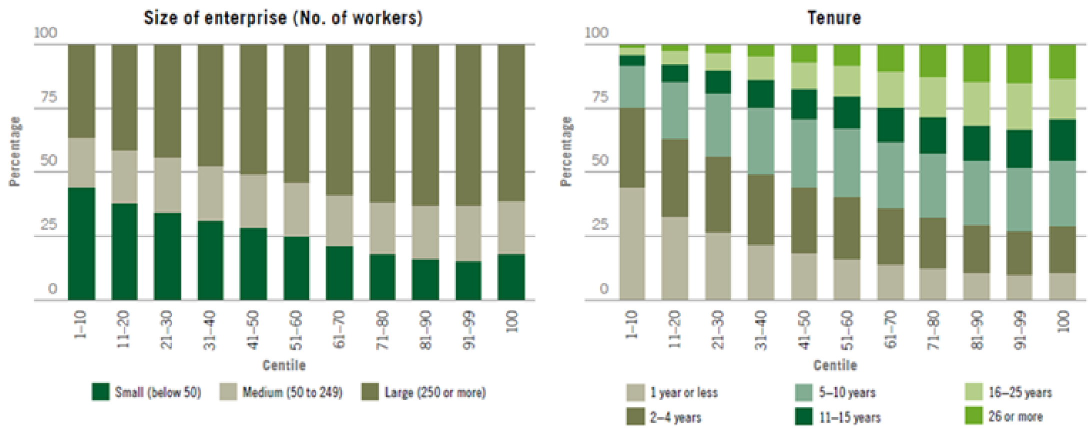

Figure 7: Size of enterprises and tenure of European workers, 2010

In what kinds of enterprises do workers work? First, there is a clear relation between the size of the enterprise and earnings: a larger number of higher wage earners work for larger enterprises, and more low-paid workers work in smaller firms. In Europe, 40 per cent of workers in the bottom decile work for companies with fewer than 50 employees, whereas only 20 per cent of those in the top 1 per cent work in smaller firms, which is shown on figure 7.

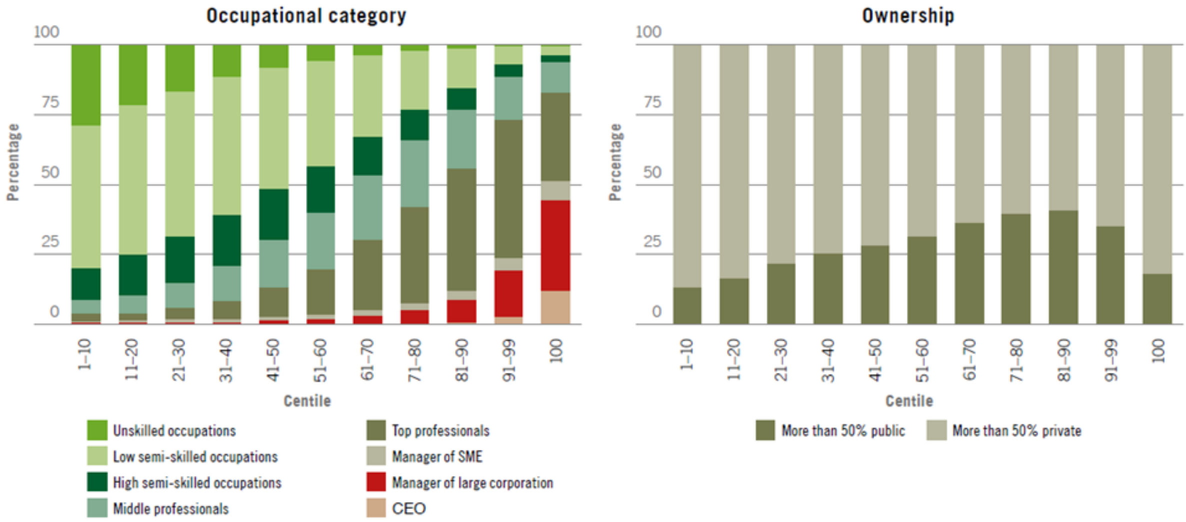

Figure 8: Occupation category and ownership of European workers, 2010

Finally, what jobs do workers hold and in what conditions do they work? On average, between 40 and 50 per cent of those in the top 1 per cent are either CEOs or corporate managers. The others are mainly the most highly skilled workers. But it is important to note that highly skilled workers are found right across the upper half of the distribution. At the other end of the wage distribution, we find mostly low-skilled but also many medium-skilled workers. It is also worth noting the high turnover among low-paid workers: almost half of the lowest-paid 10 per cent of workers have one year or less of tenure, and three-quarters have four years or less, compared to about 40 per cent of workers with mid-level wages. Looking at ownership, workers in establishments with more than 50 per cent of public capital are less likely to be in the top 1 per cent – but are also less likely to be found in the bottom 10 per cent, suggesting that public ownership is associated with less wage dispersion, while wages are more polarized to the top and bottom of the distribution in privately owned firms, that is shown on figure 8.

Clearly, the personal attributes, labour market endowments or workplace characteristics shown in the figure cannot by themselves explain these differences in wages.

4.1. How the wage distribution varies for workers with various characteristics in emerging economies?

Roughly similar patterns regarding the relationship of wages to gender, education, occupation and economic sector can be found in emerging economies, though with some major variations across an illustrative sample of countries. According to ILOstats from 2014, there are some major trends.

Looking at gender, the proportion of women in India in the bottom two deciles is similar to that in Europe (about 60 per cent), but drops precipitously thereafter, and in the upper half of the distribution women represent no more than 10–15 per cent of wage earners.

In the Russian Federation, women make up about 70 per cent of workers in lower deciles and this share shrinks to about 40 per cent in the upper deciles. In Argentina, what is striking is the much lower share of women in the top 1 per cent than in the top 10 per cent. There is a similar, but less steep, decline within the top 10 per cent in South Africa. In terms of education, the upper deciles include a higher share of university graduates than lower deciles in all the countries sampled, but this pattern is particularly noticeable in South Africa and Argentina. In the Russian Federation, there appears to be a surprisingly high proportion of university graduates among lower-paid workers, while in China a comparatively high proportion of top 1 per cent wage earners have an education below university or high-school level. Looking at occupation and economic sector, the real estate and financial sector is over-represented globally among top-paid workers as it is in Europe and, unsurprisingly, a majority of the top-paid workers occupy managerial and professional positions. In Chile, private services and trade are the largest employers of workers in the lower wage deciles, while in Vietnam workers in the lower deciles are much more likely to be employed in the manufacturing or social services sectors than is the case in either Europe or Chile.

5. Policies that affect income and earnings inequality

Global Wage Report, published by ILO shows that after the financial crisis global wage growth started to recover in 2010, but has decelerated since 2012, falling in 2015 to its lowest level in four years. During most of the post-crisis period global wage growth was driven to a large degree by relatively strong wage growth in developing countries in Asia and the Pacific, most notably in China, and also in some other developing countries and regions. More recently, this trend has slowed or reversed, with wages declining in Latin America and the Caribbean and in Eastern Europe, and slowing in Central and Western Asia, Africa and the Arab States. In developed economies, there was higher wage growth. But the wage recovery in some countries – including the United States and Germany – was not sufficient to offset the decline in emerging and developing countries, with the result that wage stagnation continues to characterize the global economy as a whole. It is showed that, after some expected countercyclical upward movement in the labour share in many countries during the years 2007–10, the labour share has resumed its long-term decline in a majority of countries during the period 2010–15. Exceptions include China, Germany and the United States, but even in these countries there is a long way to go to reverse the long-term decline.

Stagnating average wages and declining labour shares have both social and economic consequences. On the social side, the disconnect between economic growth and wage growth means that workers and their families do not perceive that they receive a just share of the fruits of economic progress, potentially fueling frustration. On the economic side, higher profit shares in developed economies often did not lead to more investment while low wage growth dampened household consumption, which can reduce aggregate demand, particularly when wages stagnate in many large economies at the same time. In this respect, higher wage growth in Germany and the United States in 2015 has had positive economic effects beyond the borders of these countries. Where economically feasible, higher wage growth should be sustained or further encouraged. Of course, this cannot be the case in every single country, as in some countries higher wage growth may increase labour costs in a way that is not sustainable for enterprises, and may result in significant reductions in exports or investment. Differentiated country-specific approaches are thus needed.

In the present context, global-level policy coordination remains important to avoid the simultaneous pursuit by too many countries of wage moderation policies or competitive wage cuts with a view to increasing exports. If such policies are pursued simultaneously in too many countries, this could lead to a decline in regional or global aggregate demand and deflation. The inclusion of wage policies on the agenda of recent G20 meetings has been a positive development. In 2016 the G20 called for the implementation of macroeconomic policies to achieve substantial wage and productivity growth, and for sustainable wage policy principles in which strengthened labour market institutions and policies – such as minimum wages and collective bargaining – can help wage increases to better reflect improvements in productivity growth.

5.1. Taxation

The rapid growth of emerging economies in the past decade or so has lifted hundreds of millions of people out of absolute poverty and reduced income disparities across the world as a whole. At the same time, until the financial and economic crisis of 2008, most other economies were expanding too. However, within the OECD and emerging economies not all regions or people benefitted equally from the growth years. On the contrary, the distribution of income tended to become more unequal.

Unsurprisingly, particularly since the onset of the crisis, these trends have increased the salience of "fairness" in political debate in many countries, in terms of both equality of opportunity and of outcomes for household incomes and consumption. While few doubt that fairness is important, interpretations of what is fair differ and may in part reflect historical norms for the distribution of income, which can differ widely between countries That said, over the longer term too much inequality may be inimical to growth.

Tax policy can play a major role in making the post-tax income distribution less unequal. In addition, tax policy is crucial for raising revenues to finance public expenditure on transfers, health and education that tend to favor low-income households, as well as on growth-enabling infrastructure that can also increase social equity.

Inequality tends to be less pronounced in OECD countries than elsewhere in the world, though in recent decades the distribution of disposable incomes has tended to become more unequal. In the mid-1980s the Gini coefficient, whereby 0 is perfectly equal stood at 0.28 among the working-age population, on average, in OECD countries. By the mid-2000s it had become more unequal, increasing to 0.31. Across OECD countries, the average Gini coefficient of disposable household income reached 0.318 in 2014, compared to 0.315 in 2010. This is the highest value on record, since the mid-1980s.

What then are the implications for tax policy? Work by experts and many others on tax reform and economic growth stress the need to weigh up the extent to which high marginal tax rates on income can act as a disincentive, for instance, for investment in human capital or discourage entrepreneurship, and the fact that progressive taxation of income is one of the main ways for governments to redistribute incomes. For many countries the potential trade-offs between economic growth objectives and equity are particularly critical at present.

The effects of taxation on income distribution needs to be seen in the context of the trade-offs between growth and equity, and this means looking at the overall effects of any reform on the fiscal regime as a whole, and not just at whether individual taxes are progressive or regressive. This is because the distribution of disposable incomes depends on both taxes and benefits. Raising indirect taxes, for instance, is often regressive where these taxes fall on the consumption of goods and services that make up a larger share of the budgets of poorer than richer households. But the overall impact of a fiscal reform can still be progressive, if these effects are offset by other tax and benefit changes. Income-related benefits, for example, are a much more efficient way of increasing the disposable income of poorer households than reduced rates of VAT.

Nor is VAT necessarily bad for redistribution. This is clear in the case of developing countries, where the relatively greater reliance on indirect taxes may make their tax systems more regressive. On the other hand, consumption taxes such as VAT may be the only way to finance (more) strongly progressive spending. However, as some countries lack the administrative capacity to make welfare transfers to households, there may be a case for differentiating VAT rate structures to tax "necessities" at a lower rate, if at all.

Most developed countries already have well-developed tax regimes that raise, on average, tax revenues equivalent to some 35% of GDP. The scale of tax revenues is capable of achieving a significant amount of redistribution. However, it is also capable, if structural tax policies are poorly designed, of becoming detrimental to economic performance.

During the 1980s a number of countries became concerned that high marginal tax rates were one of the factors that had contributed to the slowdown in economic growth in many countries in the 1970s. Moreover, high tax rates were encouraging the development of selective tax reliefs, which distorted investment decisions, and extensive (even aggressive) tax planning through the exploitation of loopholes that narrowed the tax base. Reformers decided to adopt a "broad base-low rate" approach instead, which meant pushing down statutory rates of both corporate and personal income taxes, and recovering potentially lost revenue by applying these tax rates to a broader base.

The apparent success of such reforms encouraged others to emulate them. Moreover, competitive pressures arising from the effects of liberalising trade and financial flows (notably growing international integration and globalisation) also put downward pressures on tax rates. Top marginal statutory rates of personal tax, in particular, have been cut quite substantially in many cases, from an OECD average of 66.8% in 1981 to 43.3% in 2016.

Faced with the challenge of how to restore sustainable public finances and the growth of output and employment following the post-2008 recession, what tax policies should OECD countries pursue now? Can tax policies be devised that will be perceived to be “fair” and help maintain the social cohesion, while supporting growth too? Where additional tax revenues have to be raised as part of fiscal consolidation plans, can this be achieved by broadening tax bases to make more of the income of better-off individuals taxable, or should marginal statutory tax rates be raised too?

Simply raising marginal personal income tax rates on high earners will not necessarily bring in much additional revenue, because of effects on work intensity, career decisions, tax avoidance and other behavioral responses. Where tax increases are necessary, the most growth-friendly approach would be to reduce tax-induced distortions that harm growth, including closing loopholes, and to raise more revenues from recurrent taxes on residential property, while setting taxes to reduce environmental damage and correct other externalities.

5.2. Monetary policy

In developing countries, fighting inequality and poverty is even more urgent than in developed countries, as these phenomena are more pervasive. In these economies, recessions increase poverty not only because they reduce income and increase unemployment, but also because they lead to inflation and currency devaluation. Recessions and rising unemployment tend to affect low skilled labor relatively more, while inflation hits the poor the most as money (or liquid assets) represents a relatively higher share of their total assets.

In order to reduce the effect of recessions on the poor, central banks should improve access to credit and banking services to a wider population base. The banking systems in developing economies are small, making access to credit and banking services to large portions of the population elusive or expensive. Despite being relatively small, however, banks often remain the main source of financing to the private sector and the main vehicle to channel the savings of families to business investment. Thus, increasing access to banking and credit will increase the ability of poor households to save or borrow in order to smooth their consumption during the business cycle. Increasing access to credit will also be beneficial for businesses because they will be able to finance their investment expenditure more easily and expand to create more jobs and reduce unemployment. The solution proposal is to add the objective of increasing access to banking services to the conventional central bank objectives of achieving low inflation and financial stability. The precise ways in which this objective should be integrated into the policy and regulatory framework should be developed by each central bank depending on the specific market conditions and degree of financial development of the economy. A simple step in this direction is to require all employers to pay wages and salaries through a bank deposit and, at the same time, require banks to open a free savings account (with online or mobile banking capabilities) to any individual that requests it.

5.3. Policies that affect wages and wage distribution indirectly

Policies that affect wages and wage distribution indirectly are important elements of a comprehensive response. These include access to quality education, sustained programs to improve the skills of the workforce, and better matching between jobseekers and jobs. They also include policies to address wage differentials often incurred by workers in non-standard forms of employment (particularly temporary and temporary agency workers), which are on the rise in many industrialized countries and tend to grow in developing countries in segments of the labour market previously associated with standard jobs. Measures to be adopted should seek to extend to workers in non-standard forms of employment protections that are enjoyed by workers in “standard” arrangements as well as better aligning the protections available under different employment arrangements. This would lead to the implementation of the principle of equality of treatment between workers, avoiding discrimination based on occupational status as well as reducing indirect gender-based discrimination and ensuring that employers do not make use of non-standard work only with the aim of lowering labour costs by offering worse remuneration and working conditions to particular groups of workers according to ILO.

When governments and social partners debate the ways to combat increasing inequality, it is important to remember that the dramatic increases that have occurred within the labour market and at enterprise level place a heavier burden on efforts to address inequality through taxes and transfers. This is taking place at a time when taxation systems in many countries have become less progressive and the ability of governments to collect taxes has been challenged by tax avoidance and cross-border profit-shifting strategies. This suggests that inequality will be effectively addressed only when it is tackled both through ambitious labour market and social policies that have a direct effect on wage inequality and through redistributive measures outside the labour market. More vigorous and ambitious action is clearly needed to implement wage policies at all levels that ensure a just share of the fruits of progress to all.

6. Methodology

There are many ways of measuring inequality, all of which have some intuitive or mathematical appeal. In our paper we will use Gini index as a measure of inequality of a distribution. The Gini coefficient is a measure of inequality of a distribution. It is defined as a ratio with values between 0 and 1: the numerator is the area between the Lorenz curve of the distribution and the uniform distribution line; the denominator is the area under the uniform distribution line. It was developed by the Italian statistician Corrado Gini and published in his 1912 paper "Variabilità e mutabilità" ("Variability and Mutability"). The Gini index is the Gini coefficient expressed as a percentage, and is equal to the Gini coefficient multiplied by 100. (The Gini coefficient is equal to half of the relative mean difference.) The Gini coefficient is often used to measure income inequality. Here, 0 corresponds to perfect income equality (i.e. everyone has the same income) and 1 corresponds to perfect income inequality (i.e. one person has all the income, while everyone else has zero income). The Gini coefficient can also be used to measure wealth inequality. This use requires that no one has a negative net wealth. It is also commonly used for the measurement of discriminatory power of rating systems in the credit risk management.

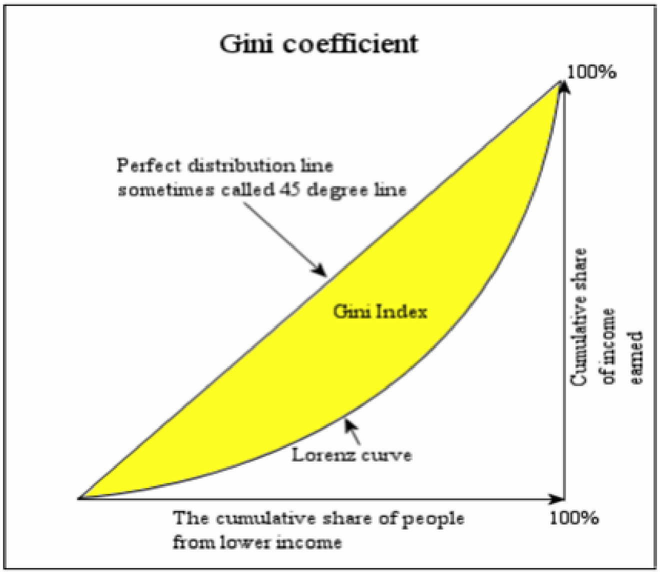

Figure 9: Gini Coefficient

A simple but effective way to examine income inequality is to calculate decile ratios. The calculation is done by taking, for example, the income earned by the top 10% of households and dividing that by the income earned by the poorest 10% of households. Decile ratios were used by Gold in their study of income inequality and teen birth rates in the US and by Lobmayer and Wilkinson in their study of income inequality and mortality in 14 countries. An important advantage of this measure is that it enables sensitivity analyses; for example, the correlations between population health and the 20:80, 30:70, 40:60 decile ratios may be compared. This allows researchers to examine which sections of the income spectrum may be most important as a social determinant of health.

7. Conclusion

Over the past 20 years, on average, household income inequality has risen in high-income as well as in developing countries. Classifying countries by income, the trend clearly shows that countries moving up in income classification have had steeper increases in income inequality than most other countries. Examining regional trends over the whole period from the early 1990s to the late 2000s, average inequality fell in some regions (Latin America) and rose in others (Asia). Looking at periods before and after the turn of the century shows more non-linear trends. In some countries, inequality rose during the 1980s and 1990s, but then fell in 2000s; in others, inequality fell during the 1980s and 1990s, but rose in the 2000s. However, despite reversals in some countries, the intensity of change has been greater in the direction of rising income inequality.

While some level of inequality reflects differences in workers' individual and productive characteristics, growing concerns have been expressed about the adverse social and economic consequences of excessive inequality. Within the overall wage distribution there are also pay gaps between different groups of workers. One of these is the gender pay gap, the percentage shortfall in the average wage of women relative to the average wage of men. Various studies have shown that across most countries for which data are available, the gap has generally narrowed over time but has not been closed. The paper provides the most recent available estimates of the gender pay gap for a wide range of countries. The paper shows that wages and wage inequality are not determined only by the skills-related characteristics of individuals (such as level of education, age or tenure) but that a host of other factors also play crucial roles: these include, for example, gender, enterprise size, type of contract and the sectors in which workers work. Descriptive statistics for a sample of both developed and developing countries document that a university degree does not necessarily guarantee a highly paid job; that the real estate and financial sectors are over-represented among top-paid workers; and that the proportion of women continuously declines as one moves towards the higher-paid deciles. In Europe, for example, women make up on average 50-60 per cent of workers in the three lowest pay deciles; this share falls to about 35 per cent among the best-paid 10 per cent of employees, and further to 20 per cent among the highest-paid 1 per cent of employees. In some emerging and developing countries, the contrast is even greater. The paper also runs a standard model which seeks to explain wages on the basis of individual skills-related characteristics such as the level of education, age and tenure.

However, national policies can be reoriented to promote income equality. National policies, including a strengthening of institutions to deal with inequality, can play an important role in reducing income inequality. Several countries in Europe, for example, have managed to use fiscal policies to mitigate a high primary income inequality down to lower levels of secondary and tertiary inequality. Additionally, the right mix of macroeconomic, fiscal, and social policies can reverse the rising trend in income inequality, as exemplified by various Latin American countries. A number of countries in that region have been able to arrest the upward trend of growing inequality, despite being subject, like all countries in the world, to the continuing challenges of globalization. Reforms aimed at raising average living standards can also influence the distribution of income. Indeed, tackling inequality goes beyond the remit of labor, social welfare, financial inclusion, and tax policies. The key to minimizing the downside of both globalization and technological change in advanced economies is a policy agenda of a race to the top, instead of a race to the bottom an agenda that includes policies to encourage innovation, reduce burdensome product market regulations that stifle competition and technology diffusion, move goods produced upwards in the value chain, and ensure that this rise benefits everyone. Sustaining growth in emerging market economies will require more intensive patterns of growth, greater flexibility to shift resources within and across sectors, and the capacity to apply more knowledge and skill-intensive production techniques. Policies to improve skills for all, to ensure that a nation's infrastructure meets its needs, and to encourage innovation and technology adoption are thus all essential to driving growth and ensuring a more inclusive prosperity.

The reality is that since the mid-1980s there has been an enormous transfer of wealth from the middle class and the poor to the wealthiest people. That is the Robin Hood principle in reverse. That is unacceptable and that has got to change. There is something profoundly wrong when the top one-tenth of one percent owns almost as much wealth as the bottom 90 percent. If we do not take action in order to reduce inequality we can get economic instability as a income inequality boomerang. Income inequality might be bad for the economy causing financial crises. Proponents of this notion suggest three mechanisms. First, households with stagnant incomes increase borrowing in order to sustain consumption growth, and their debt levels eventually become unsustainable. Second, as the rich get a larger and larger portion of the income, they end up with excess savings, which fuels speculative investment and financial bubbles. Third, the rich use their money and consequent political influence to press policy makers to loosen regulations on finance, and this too leads to bubbles. The issue of wealth and income inequality is the great moral issue of our time, it is the great economic issue of our time, and it is the great political issue of our time.

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