

TURKEY AND THE US SHOULD CONSIDER INTRODUCING ECONOMIC REFORMS IN THE AFTERMATH OF THE PANDEMIC

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Abstract

Rising income and wealth inequality were always a topical issue in the US and Turkey, which increased to much higher levels in the aftermath of the pandemic. On the other hand, loosening monetary policies as a response to the pandemic and overall growth, contributed significantly towards higher wealth inequality and inflation. This paper conducts a comparative case study to discover the current situation of rising income/wealth inequality and inflation both in the US and Turkey and proposes significant policy recommendations that can help to fix these issues. A one-time wealth tax together with annual progressive tax on appreciated gains of unrealized stocks can assist to raise revenues and to redistribute wealth efficiently. Up until now, as was discovered in this research, redistribution effects of transfers have not been very effective as wealth/income inequality have continued to rise further both in the US and Turkey. This paper suggests redistributing significant shares of transfers to early-age and primary education and to high poverty schools, which become main determinants of especially low-income children's success in the future and can lower income and wealth inequality in the future. Moreover, after loosening monetary policies during the pandemic, tightening monetary policies with higher interest rates are crucial to bring down inflation rate to its initially projected level.

1. Introduction

COVID-19 has exacerbated income and wealth inequality, resulting in 114 million people losing their employment by 2020 globally and the number of hours lost was equal to 255 million jobs amounting to \$3.7 trillion of labor income being lost by the low-income labor force (Richter 2021). Moreover, lowest-income people were the ones who were struck hardest compared to medium and high-income people¹, since low-income individuals mostly work in unskilled occupations and could not transfer to remote work, as remote employment requires higher-skilled labor (Ross and Bateman 2021). Moreover, while low-income labor force lost their occupations and had to cover their basic needs from their savings, higher-income people were able to work remotely and to save money on transport, traveling, cafes, and on buying clothing, which could potentially raise income and wealth inequality (Oswaks 2020).

Income and wealth inequality are one of the challenging economic issues that involve policy makers' attention, since it is not just because wealthy people gain more wealth, but the fact that low-income people do not have enough income, which could cover their basic needs such as decent food, housing, education, and healthcare. If all low-income people could have enough income to cover their expenses, then the fact that wealthy people become much wealthier would not be a worrying issue. Thus, the inequality issue arises when some lower income people cannot meet their basic needs, but the other higher income part of the population has much more opportunities. According to Frankfurt, inequality has a tendency leading to poverty, which makes it more devastating, and the solution is not to bring wealthy people to the level of poor people, but rather

¹ High income people are considered as top 1% for the US and top 10% individuals for Turkey, given the lower number of top 1% individuals in Turkey compared to the US.

to rescue poor people from severe poverty leaving the richest people in their position (Frankfurt n.d. cited in Scheffler 2020). Nevertheless, even though eliminating income inequality is not an eventual goal, it can still be damaging to the society, since the wealthier part of population can practice political influence and impact on legislation that could be beneficial particularly for them rather than to the society overall, which shifts the society to be governed by the wealthy people (Scheffler 2020). Thus, the income and wealth inequality gap are issues that should be tackled in order to eliminate poverty and plutocracy².

The US were chosen since the US has one of the highest income and wealth inequality in the world where the top 1% own 32.3% of the total wealth as of the end of 2021 and the total wealth of the bottom 90% decreased from 30.5% to 30.2% after the pandemic (Frank 2022). At the same time, Turkey has got the highest income inequality in Europe and the record high inflation rate of almost 70% as of April, 2022 in the aftermath of the pandemic which ended up to be highly topical countries to be chosen for this research (Bianet 2021; Trading Economics 2022a).

On the other hand, inflation has become a major issue in the aftermath of the pandemic, which was at its highest level for the past 40 years - 7.9% as of February 2022 in the US (Desilver 2021; Weforum 2022; Trading Economics 2022b). However, in Turkey it rose up to 54.44% as of February 2022 before the Ukraine war and 69.97% as of April 2022 that occurred by pandemic interruptions of Global Supply Chains, greater consumer demand and chaos in the labor markets, which poses a massive challenge to people (Trading Economics 2022a; Statista 2022a).

² Plutocracy is the system where the state is ruled by wealthy people.

The research question of this thesis is:

How could the US and Turkey implement the best policies to reform in order to curb income and wealth inequality and inflation?

This research argues that Turkey and the US should consider economic reforms such as introducing a one-time wealth tax and taxing appreciated gains of both realized and unrealized assets together with redistribution effects to early-age and primary education and to high poverty schools. Finally tightening monetary policy could be useful to tackle rising wealth inequality in the US and Turkey and particularly to resolve hyperinflation in Turkey where inducing more money in the economy can be more catastrophic. The research will review and critically evaluate the measures introduced so far in Turkey and the US in the aftermath of the pandemic. After reviewing literature on trends and causes of income inequality and OECD countries' experience with the wealth tax, analytical policy approach together with significant evidence in the form of data including figures will be used to address the research question.

This comparative case study can allow for positive value added to the literature, to indicate the potential economic policies that could relieve the post-pandemic challenges. The research can contribute to the literature in a way that there has not been done comparison analysis especially after the pandemic to tackle income and wealth inequality and hyperinflation via new economic reforms.

The research is structured as follows: Chapter 2 contains literature which discusses trends of rising income inequality in OECD and drivers of income inequality and compares effects of the pandemic and Ukraine's war on income/wealth inequality and inflation in the US and Turkey. Chapter 3 summarizes OECD countries' practice of wealth tax. Chapter 4 discusses the redistribution effect and cash transfers in OECD by evaluating their effectiveness. Chapter 5 contains of methodology

which is about critical assessment of new economic policies both in the US and Turkey as a response to rising income/wealth inequality and inflation. Chapter 6 discusses my findings about the effect of the pandemic and Ukraine's war on income/wealth inequality and inflation and effectiveness of the wealth tax and redistribution of cash transfers. Chapter 7 concludes the paper and Chapter 8 proposes the policy recommendations in brief.

2. Literature Review

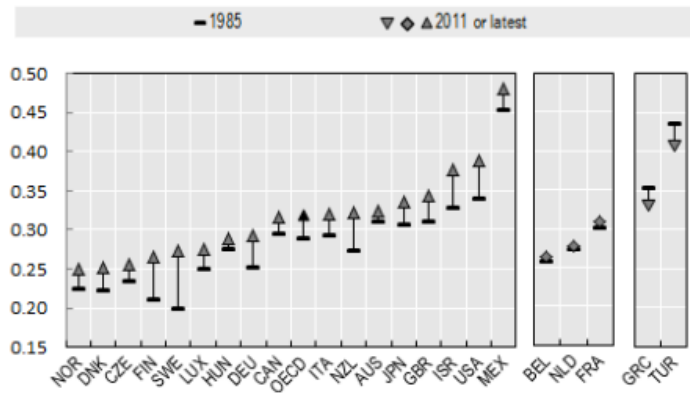
Literature Review comprises of four parts, which discovers the trends of rising income inequality and finds out its key drivers. Furthermore, the effect of the pandemic both on income inequality and inflation will be evaluated in the US and Turkey. Finally, Ukraine's war has added some of its effect especially on Turkey, which is more dependent on trade with Russia and Ukraine than the US.

2.1. Trends of rising income inequality in OECD

According to the OECD paper, income inequality has been rising since the 1980s and most of the OECD countries experienced a historical increase of income inequality (Cingano 2014, 9). For instance, in OECD countries the average income of the wealthiest people was 9.5 times higher than the poorest people in 2014, whereas in the 1980s it was seven times higher (Cingano 2014, 9). It is a bit different across OECD countries where Nordic and some European countries experience lower ratios, whereas in Greece, Israel, Turkey and the United States it got up to sixteen times higher than Nordic countries and the highest GINI coefficient can be noticed in Chile and Mexico where GINI ratio is between 27 to 30 times higher than lower ratios like in Nordic countries (Cingano 2014, 9).

Gini coefficient is used to assess inequality varieties from 0 to 1 where 0 indicates the same income among all populations and 1 when one person has got the whole income. Across OECD member states, the Gini coefficient was 0.29 in the mid-1980s, but in 2011-2012 it increased to 0.32.

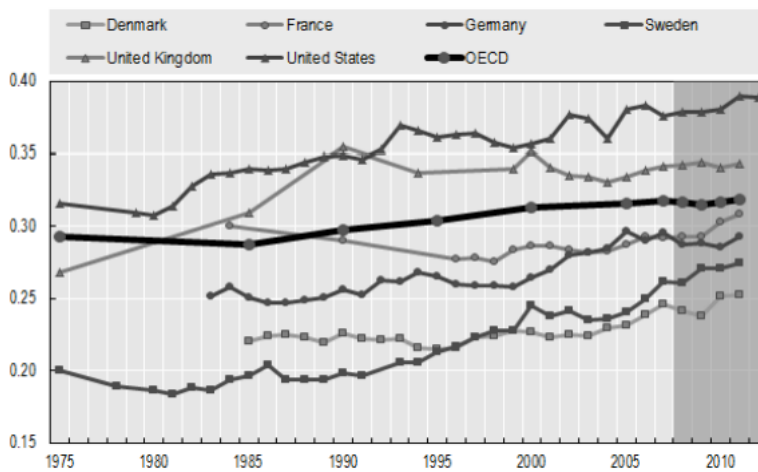
Figure 1. Gini coefficients of income inequality, mid 1980s and 2011/2012



Source: OECD Income Distribution Database n.d. cited in Cingano 2014.

Figure 1 indicates that income inequality rose in 17 OECD member states out of 22, particularly the Gini coefficient went up by more than 0.05 percent in the United States, Israel, Finland and Sweden, whereas it fell a bit in Turkey and Greece between mid-1980s and 2011/12.

Figure 2. Gini coefficients of income inequality in chosen OECD member states, 1975 – 2011/12



Source: OECD Income Distribution Database n.d. cited in Cingano 2014.

As for *Figure 2*, over time the Gini coefficient across OECD countries varied. For instance, between 1970-1980s income inequality rose mainly in the United Kingdom, Israel and the United States. However, starting from the 1980s income inequality started to become prevalent across all other OECD members including Turkey. Between 1990 and 2000s, income inequality took a high rise not only in the United States and Israel, but also in Nordic countries. Moreover, during the financial crisis of 2008, income inequality stopped rising in some OECD countries and also went down in some other countries, but in two years after the Great Recession, since 2010 income inequality started to increase again (Cingano 2014, 10).

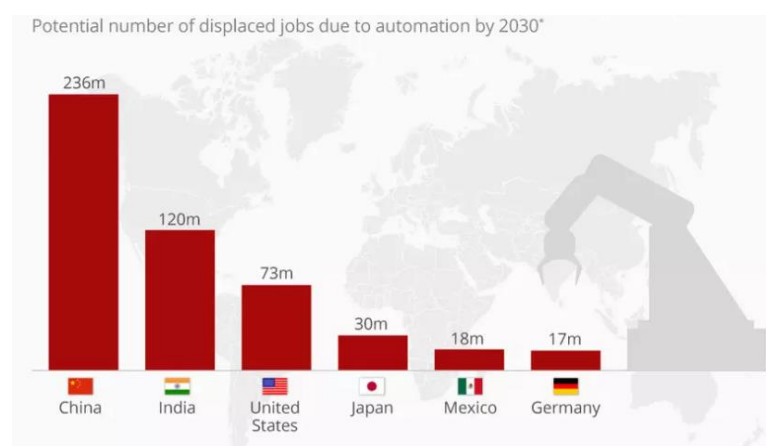
2.2. Drivers of income inequality

One of the drivers of rising income inequality is emergence of new technologies and robotics that were found to be more efficient and productive than labor force and replaced labor force significantly leaving unskilled labor without job and wage. As an example, according to the researchers from MIT, one introduced robot could be a replacement for 3.3 workers in the US and overall robots have not yet replaced fully the low-skilled labor in the US where 38 percent of robots are used in auto making industries, 15 percent in electronics, 10 percent in plastics and chemistry industry and 7 percent in metals industry, which decreased the salary of workers by 0.4 percent during 1990-2007 (Dizikes 2020a). Moreover, Acemoglu and Restrepo in their research about “Robots and Jobs: Evidence from US Labor Markets” found out that robots impact on income inequality directly, since robots mainly replace low-skilled and middle skilled labor, who have no options to find another job, which indicates of a link that more involvement of robots decrease the wage of labor force and tend to be a major cause of rising income inequality in last 30 years (Acemoglu and Restrepo 2020). The estimation of Acemoglu and Restrepo indicated that

one additional robot per 1,000 workers is associated with a 0.8 percentage point decrease in the share of labor in 1992-2007 in the US (Acemoglu and Restrepo 2020, 24).

From another side in Turkey, according to PWC based on OECD PIAAC data, by mid-2030s 33% share of jobs are in risk of being automated in all sectors, which comprises of 38% people with low education, 35% people with medium education and only 7% graduates of high education, that is similar to the US where low-skilled people will potentially be replaced by robots. However, by the early 20s the share of jobs which are automated, is lower in Turkey accounting for 1% in all industry sectors vs 5% in the US, which is also possibly because Turkey is more service oriented and tourism and hospitality industries are harder to be replaced by robots (PwC 2022a). Thus, the main reason why automation increases the income inequality is that low-skilled workers such as factory workers, receptionists and similar kinds of workers are being replaced by the robots, whereas other high-skilled workers benefit from new sophisticated jobs through having much higher salaries (Dizikes 2020b).

Figure 3.



Source: McKinsey n.d. cited in Dizikes 2020b.

According to *Figure 3* provided by McKinsey, there will be a lot of labor force's jobs replaced by automation by 2030. As an example, China and India will have to replace 236 and 120 million respectively of their labor force with robots, whereas the United States comes third in the row with replacement of 73 million of labor force with robots, which yields lots of unskilled labor to unemployment and raise income inequality to higher level, while according to another report by McKinsey about Turkey, there are 7.6 million jobs estimated to be potentially lost by 2030, which is almost ten times less than the estimated job loss in the US (Dizikes 2020b; McKinsey 2020, 6). Thus, the emergence of technology and robotics is expected to make the wage gap between higher and lower income people higher that increases income inequality.

Second cause of rising income inequality within the countries of OECD, is the emergence of globalization in past years and particularly trade openness and Global Supply Chains when large companies of the developed firms of the US and EU offshored major parts of their production chains to developing countries like China, Bangladesh and so on. It impacted significantly on rising income inequality since large firms shifted low-skilled jobs from their countries to poorer countries and consequently harmed low-skilled labor in their own developed countries by making them unemployed. Thus, despite the fact that low-skilled labor lost their jobs in developed country like the US because of offshoring, medium-skilled and high-skilled labor did not lose their job, but instead benefitted more, since only low-skilled jobs were offshored and higher-skilled jobs were left back in developed countries providing more demand for medium-skilled and high-skilled workers (Schoder 2018). From another side, Turkey's involvement in Global Value Chains raises trade openness, investment and increases the export level, which potentially impacts positively on real income growth (Ziemann and Guérard 2016). Furthermore, Global Value Chains provided

additional employment to unemployed low-skilled and medium-skilled labor force which is a positive effect to the job market in Turkey.

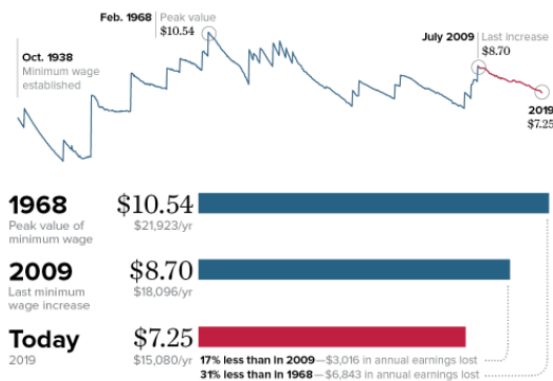
Second sub-part of globalization that impacts income inequality is immigration of low-skilled labor from developing countries to more developed countries. David Card found out that immigration increased income inequality by 5 percent during 1980-2000 in the United States, since overall low-skilled immigrants tend to have lower income than native low-skilled labor force without altering the native low-skilled labor's income (Nowrasteh 2015). In case there is a possibility to hire immigrants with lower wages, there will be no need to increase the wage of low-skilled native workers, which leaves native labor force without any other choice, but to agree on the same wages as before due to competition which arose from immigration. Thus, while low-skilled labor does not face pay rise, higher-skilled labor force experience much better pay rise that increases income inequality consequently in the US. On the other side, Turkey is also one of the largest host of refugees mainly from Syria which accounted for 2.5 million of Syrians in 2015 and 3.5 million people in 2018, who joined the labor market in Turkey and made some significant impacts on employment and wages of natives. According to the Institute of Labor Economics, it was found that arrival of every 10 Syrian migrants created around 5.5 jobs for native men in formal sector, but in informal sector every 10 Syrian people removed 2-3 full-time jobs for native men, 4 women with part-time jobs and self-employed jobs, which comprised 40% of women working part-time (Aksu, Erzan, and Kırdar 2018). Furthermore, 10%-point rise in migrant-to-native ratio could remove half of the jobs for men and 30% of jobs for women out of market in agricultural sector, which resulted in reduction of men's wages by 15-20% and that is also consistent for manufacturer sector (Aksu, Erzan, and Kırdar 2018). Given the fact that the share of shadow economy in Turkey is twice higher than average of OECD countries and 34% of total employees

are employed informally as of 2015 and considering that the informal sector employs more low-skilled labor, it can be concluded that arrival huge number of refugees has negative impact on employment and wages of low-skilled labor force in Turkey, which is somewhat consistent with the impact of migration on wages in the US where natives had challenges asking for higher wages, because of being easily replaced by the migrants (Aldan, Burcu, and Yüncüler 2022).

Furthermore, besides being a host of refugees, Turkey has witnessed a significant number of locals, who migrated to other countries. For instance, based on data from Emirdağ in the province of Afyonkarahisar in Turkey, a large number of residents of this province migrated to France and Belgium earlier and their number is 3,5 times higher than the number of citizens living inside Emirdağ currently. Those emigrants have contributed to poverty and income inequality reduction of the region by their significant remittances' transfers and expenditures especially during summer when Emirdağ welcomes those migrants back home (Dağdemir et al. 2018). Thus, compared to the US, Turkey is not only a host of a massive number of migrants, but also a net receiver of remittances that contribute positively to the local economy and partly lower income inequality.

One more major factor contributing to the rising of income inequality is a decline in real minimum wage. As a real minimum wage is adjusted for inflation, throughout history it has decreased significantly, especially for low-income people who earn the minimum real wage, as provided at the table below in the US.

Figure 4. Real value of the minimum wage in the US (adjusted for inflation)

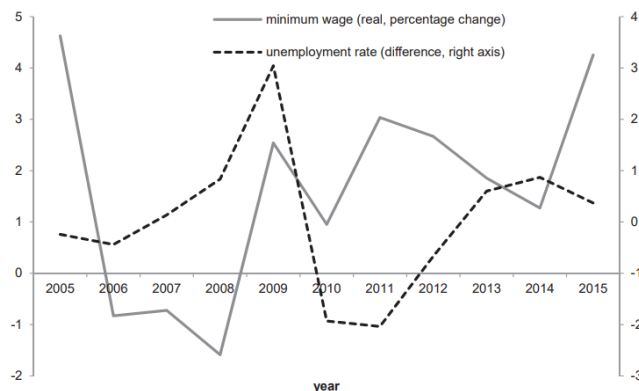


Note: All values are in June 2019 dollars, adjusted using the CPI-U-RS.

Source: Economic Policy Institute n.d. cited in Cooper, Gould, and Zipperer 2019.

As is depicted in Figure 4, real minimum wage decreased by 17 percent at the federal level in 2019 since 2009 and by 31 percent since 1968, which means low-income workers have less 6,800 USD annually to spend on their basic needs compared to the workers 50 years ago in the United States (Cooper, Gould, and Zipperer 2019). As it was argued in introduction, it is not just rich people get much richer, but also it is because poor people become much poorer, as it is in case of minimum real wage when low-income people became poorer than low-income people from 1968 period of time, although everything should have been different that after emergence of technological developments, all people in general should have become much richer, which is sadly not so in reality. Comparatively to the US, the labor market in Turkey is severe in relations with work protection, but very flexible with regard to wages. Even though there are several trade unions, only 8% of formal employees join trade unions and given that 34% of total employees are employed informally, their real wages remain at the bottom of pay distribution.

Figure 5. Real minimum wage and the unemployment rate.



Source: TURKSTAT National Accounts and Household Labor Force Survey n.d. cited in Aldan, Burcu, and Yüncüler 2022.

In addition, according to Figure 5, there is very cyclical real minimum wage since 2005 until 2015 in Turkey, when it was falling during global financial crisis and started to return to its high level in 2015 close to its initial level in 2005 and the cyclicalities of wages are explained by the fact that Turkish employees do not have much of wage bargaining power, which leads to high elasticity of wages to business cycle, and from another side compulsory minimum wage and large stake of informal jobs can lower the cyclicalities of wages (Aldan, Burcu, and Yüncüler 2022). This low wage bargaining power of Turkish employees is somehow similar to employees in the US, due to large competition in the workforce and because of many migrants who are ready to work for lower wages.

2.3. The effect of the Pandemic on inequality and inflation

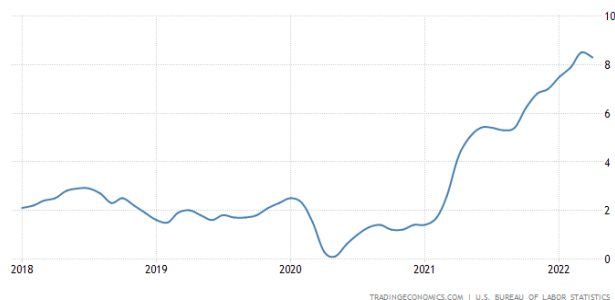
As a result of pandemic, income inequality has risen both in the US and Turkey, as GINI coefficient that was 0.48 in 2019, rose to 0.49 in 2020 in the US, while in Turkey GINI coefficient was 0.417 in 2019 and increased to 0.434 in 2020, indicating a rise in inequality both in the US

and Turkey (Statista 2022b; Statista 2021). Rise of income inequality both in the US and Turkey was as a result of massive job losses of low-income people and due to the top 1% of Americans gaining more than \$6.5 trillion in equities during the pandemic in the US and the top 29% of population gaining much more wealth in Turkey (Frank 2021; Yıldız 2021). Moreover, in the US during the pandemic 400 richest people from Forbes gained \$4.5 trillion, replenishing their wealth by 40 percent (Rushe 2021). Also, as an example Jeff Bezos, who is the founder of Amazon, was considered as a wealthiest person with the net worth of \$201 billion according to the Forbes, whereas founder of Tesla Elon Musk have got a net worth of \$190.5 billion and Mark Zuckerberg with \$134.5 billion of net worth, while in Turkey according to BDDK data people with 1 million liras at minimum from March 2020 grew their wealth by 410 billion liras at the end of that year and overall at the beginning of the pandemic the number of millionaires in Turkey was 246,136 which increased to 308,278 by the end of 2020 with additional of 62,142 rich people being added to the list of rich people (Rushe 2021; Yıldız 2021).

Moreover, in the US, 39.3% of workers from leisure and hospitality sectors and 23% of workers from other services were the most affected ones because of losing their jobs and the study suggests that the workers from those mentioned sectors were low-wage workers, whereas in Turkey due to firm government restrictions, tourists' mobility declined by 70-80% leading to ruining 2.6 million jobs amounting 9.2% of total employment in trade and tourism sectors, which hit mainly informal workers, the lower-skilled, as well as female workers in second quarter of 2020 (Falk et al. 2021; Baez and Demirgüç-Kunt 2021). Thus, it can be noted that the low-income labor force were among those, who were heavily affected by the pandemic and became poorer, whereas medium-income people benefitted from remote work and higher-income people became much wealthier during the pandemic, which increased global income inequality and poverty significantly (Dauderstädt 2021).

In addition, as was discussed earlier, globalization and Global Value Chains were one of the factors that contributed towards rising income inequality. However, during the pandemic interruptions of Global Supply Chains was also one of the main contributors together with greater consumer demand and chaos in the labor markets that yielded to high inflation rates globally including in Turkey and in the US (Desilver 2021).

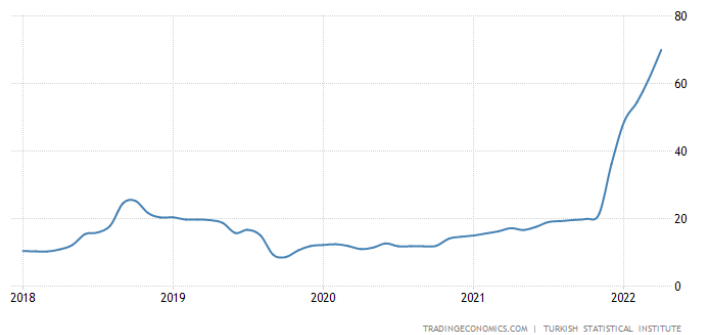
Figure 6. The U.S. inflation rate (2018-2022)



Source: U.S. Bureau of Labor Statistics n.d. cited in Trading Economics 2022b.

As an example, in the US inflation was 7.9% as of February 2022 compared to a previous year, which is at its highest level for the past 40 years and increased the prices of staple goods and energy significantly compared to earlier years (Weforum 2022; Edelberg 2021).

Figure 7. Turkish inflation rate (2018-2022)



Source: Turkish Statistical Institute n.d. cited in Trading Economics 2022a.

However, compared to the US, the situation in terms of inflation is much worse in Turkey, since its inflation rate was 54.44% as of February 2022 right before the Russian invasion, which went up afterwards to 61.14% in March of the following year, that is at its highest rate for last 20 years so far (Statista 2022a). Moreover, as depicted in Figure 7, inflation rate went further up to 69.97% in April of the following year in Turkey, which is indeed devastating (Trading Economics 2022a). It leads lower-income people to poverty and makes middle-income people poorer because of high costs and rising prices of medicine, food and energy. Turkish problem is also because of the intervention of politics into operations of the Central Bank with the intention to decrease interest rate more and more, so that people could borrow more and consume and invest more into the economy, but the problem with this policy is that the more money is in circulation, the higher will be the rate of inflation (Cohen 2021). Nevertheless, Mr. Erdogan is not willing to change his policy, and so far, he has fired two Governors of the Central Bank due to not following his policy. From another side, Turkey suffers from harsh depreciation of its currency, lira against dollar, which lost more than 45% of its value and made locals worse-off after consuming imported automobile parts, medicine, fuel, fertilizer and raw materials, even though partly Turkey benefits of it by exporting its goods with cheaper prices because of depreciation of lira (Cohen 2021). Thus, inflation in the US is upsetting for the locals, but compared to Turkey it is certainly much lower and also the dollar does not depend on any other currencies, so people do not suffer from fluctuating exchange rates. In both countries due to inflation, real wages decrease which can potentially increase income inequality, as discussed earlier.

2.4. Other political externalities

Other political externalities that can have an impact on income inequality are wars, political escalations, as destroying of productive forces and infrastructure and increased transaction costs tend to impact negatively on economic output and growth, which leads to businesses leaving the conflict zone because of an unsafe environment that after all impacts on rise of unemployment and falling wages of low-skilled labor force (Bircan, Brück, and Vothknecht 2010, 6). These authors found that after facing violent conflict, countries tend to have on average 2.7-point higher Gini coefficient than countries which had no war in the last 10 years, since social and economic inequalities between social groups, is found to be positively associated with the outburst of conflict (Bircan, Brück, and Vothknecht 2010, 3-4). Moreover, it is argued that inequality starts to increase during the war time and specifically continues to rise in the first five years after the conflict ends, which amounts to 1.7-point rise of Gini coefficient during the war (Bircan, Brück, and Vothknecht 2010, 3-4). Thus, the technological war between Trump and China and further Transatlantic negotiations between the US and European Union to combat China's rising violation of human rights and competition policy, could escalate to much worse conflicts which has negative impact on economic growth and income inequality in the future (Blockmans et al. 2021). Furthermore, the invasion of Russia to Ukraine and the war between them can worsen the situation amid the pandemic's effect, in terms of rising prices in gas, oil, grains, sunflower of oil and wheat which may increase the poverty and global hunger around the world, since both Ukraine and Russia together export 29 percent of global wheat, 19 percent of global corn and 80 percent of global sunflower of oil and because Ukraine and Russia partly banned exporting their wheat, it can significantly increase the price of bread (Phillips 2022; Hürriyet Daily News 2022). The US does not import much wheat, but rather is the second top wheat exporter after Russia, which will not be

affected much if not only by the disturbance of rising prices of wheat on other parts of the planet amid soaring food prices (Peck 2022; Haddad and Duggal 2022). However, for Turkey it is certainly devastating, because Turkey imports 70 percent of wheat from Russia and 15 percent of wheat from Ukraine, which is used to produce pasta and flour, as Turkey exports 1.3 million tons of pasta per year and it is considered as one of the biggest exporters of pasta and flour, which certainly means that Turkey can witness a huge spike in bread prices and disturbance in its exports (Hürriyet Daily News 2022).

Secondly, as the EU imported 45% of natural gas from Russia as per last year, imposing sanctions on Russian gas will force the EU to search for other gas exporters which will be more costly for EU countries, which may well raise the gas prices and given the fact that energy is traded in global market, if there is a challenge in one part of planet, the other part will also be impacted (Peck 2022). This is the reason why the prices of gas and oil went up in the US too, since from now on the energy market will have to function without Russian gas and oil (Peck 2022). For Turkey, it is more upsetting than the US in terms of gas and oil prices, because Turkey imports 45% of its natural gas, 17% of oil, and 40% of its gasoline from Russia and this is the reason why Turkey does not want to sanction Russian oil and gas (Daily Sabah 2022). And Turkey also faced hikes in gas prices as was mentioned earlier due to disruptions in the global energy market (Kubilay 2022). Moreover, compared to the US, Turkey is much more dependent on trade with Russia and Ukraine and on tourists coming from Ukraine and Russia. As an example, in 2021 total export of Turkey to Ukraine amounted to \$2.9 billion and 2.1 million of Ukrainian tourists came to Turkey, but this year because of blocked Ukrainian ports and all other logistical routes, it might be equal to zero and there might be no tourists either (Kubilay 2022). With Russia, Turkey also has very close economic relations and annual export of Turkey to Russia is \$5.8 billion and number of tourists

who came to Turkey in 2021 was 4.7 million people and Turkey expected 10 million of Russian tourists this year, and it will cost \$5 billion for Turkey, if it loses those anticipated tourists (Kubilay 2022). Thus, the war in Ukraine will significantly raise the prices of oil, gas and food in Turkey and leave a lot of people, who work in service and export-oriented industries without income, which is more devastating and can raise poverty and income inequality in Turkey more than in the US because of that dependency on Russia and Ukraine, which only faced slight hikes in food, gasoline and oil prices so far.

3. OECD countries' practice of wealth tax

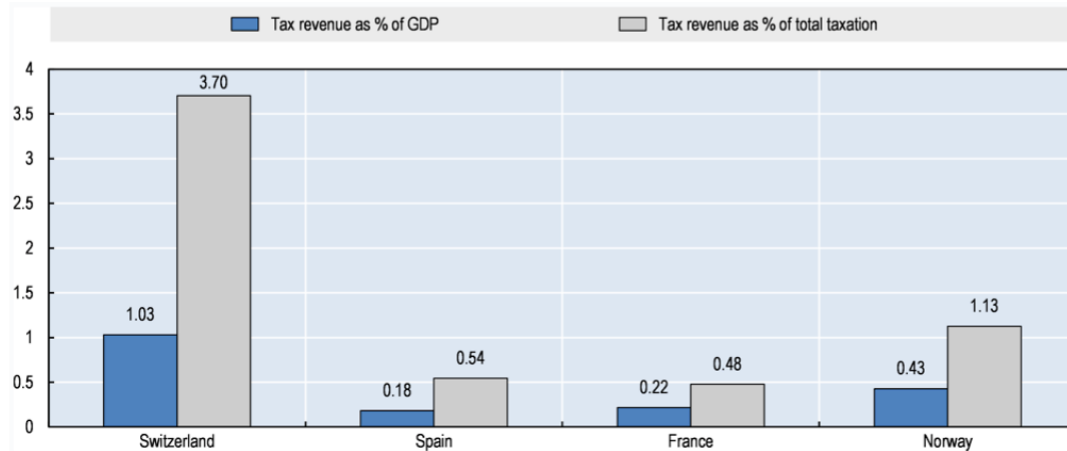
This chapter will assess the OECD member states' practice of wealth tax and find out whether they were successful by introducing a wealth tax or not and if not, what lessons can be learnt from their experience.

Since 1990 there were 12 OECD countries including Austria, Germany, Denmark the Netherlands, Luxembourg, Finland, Sweden, Iceland, France, Spain, Switzerland and Norway that imposed a net wealth tax, but only 4 of them retained the net wealth tax including as France, Spain, Switzerland and Norway by 2017 and later in 2018 France also abandoned the wealth tax so that more investment were attracted from foreign investors in order to boost innovation and business growth (OECD 2018; Ledsom 2020).

One of the main reasons why 9 OECD countries abandoned a wealth tax is that many wealthy individuals found a way for tax avoidance and tax havens in other countries which deprived those countries from revenues from all other taxes, which would otherwise have been paid by those individuals (OECD 2018). Also, policymakers found out that a wealth tax potentially discouraged entrepreneurship and innovation (Bunn 2022).

Moreover, as depicted in Figure 8 a net wealth tax generated small tax base as a result of tax avoidance and tax evasion that turned out to be unsuccessful to achieve the redistributive aims.

Figure 8. Revenues from net wealth taxes in 2016



Source. OECD Revenue Statistics Database n.d. cited in OECD 2018.

Among the remaining four countries with a wealth tax, as a share of GDP generated tax revenues from net wealth taxes amounted to the lowest 0.18% in Spain and to the highest 1.03% in Switzerland, whereas as a share of tax revenues, it accounted the lowest 0.48% in France and to the highest 3.7% in Switzerland (OECD 2018). Switzerland's larger tax revenues are due to lower exemption possibilities and larger number of wealthy individuals (OECD 2018). Nevertheless, it can be clearly noticed that introduced net wealth taxes have not been very successful in producing a large tax base.

Two interesting things can be noticed in all these four countries, as currently only Switzerland, Norway and Spain remained after France abandoning a wealth tax in 2018 (Ledsom 2020). All of them charge indeed low wealth tax rate and offer some exceptions. Annually in Spain there is the wealth tax from 0.2% up to 2.5% depending on the amount of wealth and region, that exempts residents of Madrid from this tax (Zeballos-Roig 2019). Meanwhile, in Norway wealth tax imposed by the central government is 0.15% and up to maximum 0.85% by municipalities, whereas in Switzerland it amounts up to 1%, with the highest rate in western part and lower rate in German speaking cantons (Zeballos-Roig 2019). Secondly, the threshold is pretty low too as it

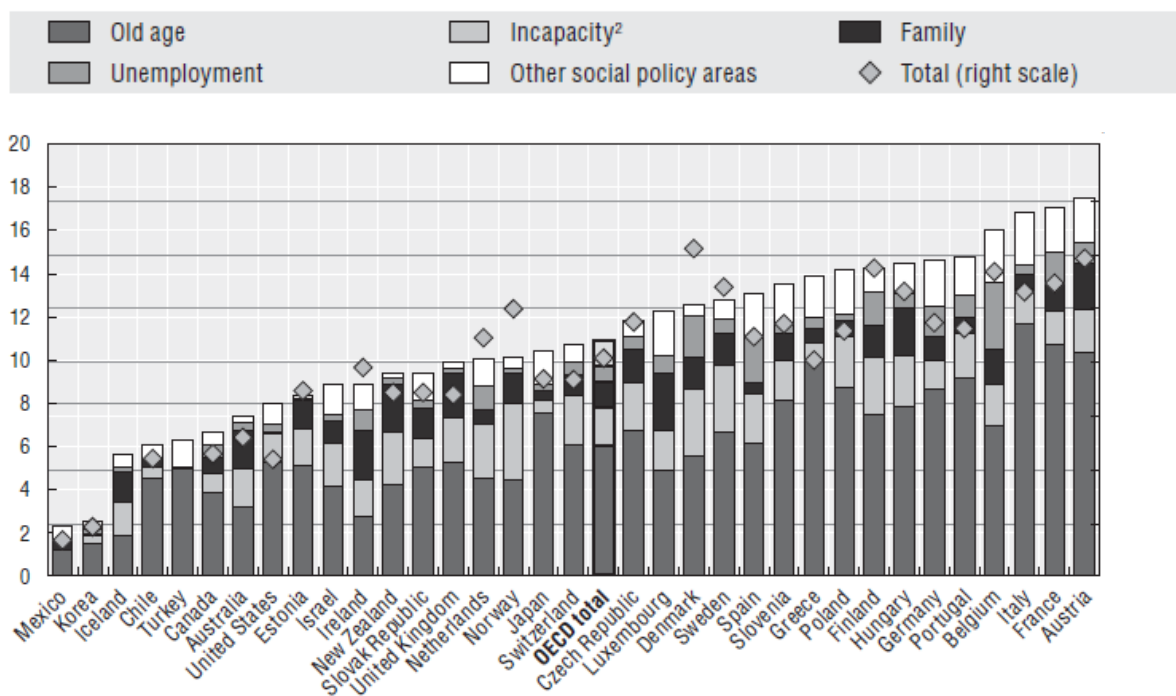
does not necessarily target the wealthiest part of population. As an example, threshold of imposing net tax starts from €700,000 in Spain and starting from 1.48 million krone (around \$174,000) in Norway, while in Switzerland it depends on canton, as in Zurich it starts from 77,000 Swiss francs with 0.05% and the rate increases depending on net wealth as of 1 January 2022 (Zeballos-Roig 2019; PwC 2022a). Earlier in France, there was rates of 0.5-1.5% with threshold starting from 1.3 million euro (Bunn 2022). Thus, these two points possibly can explain the low generated revenue since in most of these countries there were low interest rates and low thresholds for wealth taxation that do not only target the very wealthiest, which is not the best solution for tackling wealth inequality.

4. Redistribution effect and cash transfers in OECD

This chapter will assess the redistribution effect and cash transfers in OECD countries and will find out how effective were redistribution of cash transfers in particularly benefitting low-income households.

Overall in OECD, countries with higher income dispersions have a tendency to more redistribution and it is found that cash transfers have a greater impact on reduction of income inequality than taxes in major OECD states with the exception of the US which achieved significant reduction via both transfers and taxes as in example of the US social program called – the Earned Income Tax Credit, as mentioned in OECD paper³ (Joumard, Pisu, and Bloch 2012, 4).

Figure 9. Public cash transfers for OECD states, % GDP, 2007



Source. OECD Social Expenditure Database cited in Joumard, Pisu, and Bloch 2012, 8.

³ Earned Income Tax Credit assists low-income and middle-income U.S. taxpayers especially with kids by refunding some part of their paid taxes which also depends on their income. (IRS n.d.)

Redistributive effects are different across countries in OECD. For example, all Nordic countries such as Norway, Sweden, Denmark and Finland have three times bigger redistributive effects than in the US, which is because Nordic countries make huge cash transfers which are relatively more progressive⁴ compared to average OECD countries and also they have high tax to GDP ratio with lower transfers on old-age pensions (Joumard, Pisu, and Bloch 2012, 25). Meanwhile in 10 other European states such as Austria, Germany, France, Italy, Greece, Slovakia, Czech Republic, Italy, Luxembourg and Portugal, there are also high tax-to-GDP ratios, but high transfers mostly on old-age pensions as depicted on *Figure 9*, with lower focus on the redistribution to low-income individuals (Joumard, Pisu, and Bloch 2012, 25). The third group comprises 11 countries such as Australia, Iceland, Ireland, Israel, New Zealand and the UK with lower redistribution effect on old-age pensions, but rather a means-tested system, while compared to these countries there are four sub-group states such as Canada, Korea, Switzerland, Japan and the US which have more transfers on old-age pensions and relatively less progressive transfers⁵ compared to first sub-groups. The final group comprising of four countries such as Mexico, Turkey and Chile have low spending on cash transfers besides Poland, mostly on old-age pensions, which are generated from consumption taxes compared to the previous three groups that generate budget mostly from personal income taxes with the exception of Germany and Italy and corporate taxes mainly in third group (Joumard, Pisu, and Bloch 2012, 25). Consequently, the researchers added that Nordic countries as well as Switzerland have lower income inequality compared to other groups evolving due to their transfer policies, although Switzerland does not correspond to the same group with Nordic countries.

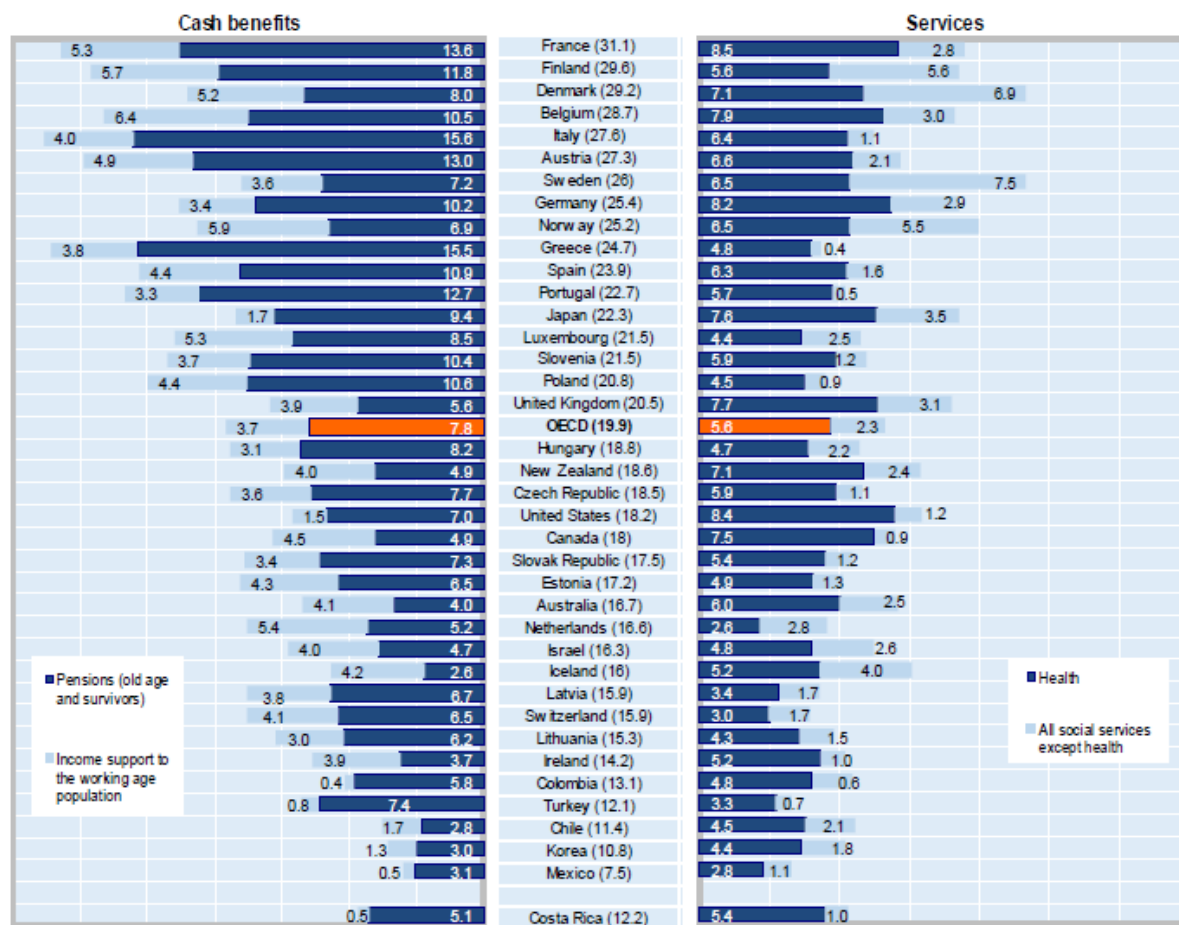
⁴ More progressive transfer means that it benefits more low-income people than high-income people, whereas less progressivity of transfers means vice versa (Heisz and Murphy 2015).

Family cash transfers are spent mostly on old age pensions, incapacity that are disability pensions and sick leave, family and fewer on unemployment and other social policy areas in OECD countries which help to decrease income inequality and to defeat poverty (Joumard, Pisu, and Bloch 2012, 8-9). Transfers on old-age pensions comprises the major part of cash transfers and is less progressive across of OECD, because as individuals above 65 are the ones who receive 90% of old-age transfers and given that low-income people mostly live shorter life, transfers on old-age pensions benefit mainly higher income households (Joumard, Pisu, and Bloch 2012, 8-9). Cash transfers on incapacity particularly disability pensions are the second largest across OECD, mainly high in Nordic countries, which indeed assists to reduce income inequality at a certain period of time but in long-term it increases income inequality in a way that it decreases income mobility and produces poverty traps, since there are higher rate of unemployment among them compared to individuals with no disability, which require new policy amendments to reintegrate them into labor market (Joumard, Pisu, and Bloch 2012, 10). In addition, cash transfers on unemployment are not much progressive but are more based on insurance and conditional on earlier contributions in most OECD countries with the exception of some which levy a ceiling on unemployment payments that indicate some progressivity of transfers (Joumard, Pisu, and Bloch 2012, 10). Among all cash benefits, family benefits including child benefits account for a small share of transfers, but have the most solid redistributive effect that benefit mainly low-income individuals through their child benefits, since low-income individuals have more children than higher individuals (Joumard, Pisu, and Bloch 2012, 12). Family benefits are also relatively more progressive than other cash transfers and their large impacts were observed in Ireland, Australia, Netherlands and Austria which are significantly higher than in the US, Switzerland, Portugal, Norway and Denmark (Joumard, Pisu, and Bloch 2012, 12). Thus, depending on the type of benefits progressivity of cash transfers differs,

meaning progressivity is lesser for incapacity, unemployment and old-age benefits than for family benefits.

The latest OECD paper in this regard showed some differences, which includes updated data and services. As an example, as is depicted in *Figure 10*, as of 2017/2019 compared to *figure 9*, as of 2019 France became the most public social spender, surpassing Austria, which is the second highest public cash payer, followed by Belgium, Denmark, Finland etc. as figure comprises of not only public social spending but also services including health and other social services (OECD 2020).

Figure 10. Public social expenditure, in % GDP, for 2017/19 years



Source. OECD Social Expenditure Database n.d. cited in OECD 2020.

Data is provided as of 2019 for Israel, Mexico and Chile, as of 2018 for Colombia, Canada,

France, Costa Rica, Hungary, Korea, the US and as of 2017 for Switzerland (OECD 2020). Income support to the working age population stands for incapacity, family, unemployment and other social policy areas' benefits as indicated in *Figure 9* and described earlier.

As per *Figure 9*, it was noted that old-age benefit is the largest area where public transfers are spent, whereas with update of *Figure 10*, it is added that both old-age pensions and health are two main spheres where the OECD member states spend 7.8% and 5.6% of their GDP on average (OECD 2020). Overall in 2017/2019 across OECD states public cash transfers amount to around 4% of GDP besides old-age pensions, which include 1.6% of GDP on incapacity, 1.1% on child allowance and parental leave benefits, 0.6% on unemployment and 0.4% on other social policy areas (OECD 2020, 4). Moreover, 2.3% of GDP on average across OECD is spent on social services except health including early childhood education and care service for children and elderly and disabled services, whereas in Nordic countries spending on services except health amounts to 3-4% of GDP (OECD 2020, 4).

5. Methodology

This chapter will discuss about fiscal stimulus of the US and Turkey as a policy response to the pandemic and then will critically assess and propose economic policies including a one-time wealth tax and progressive income tax that will be imposed on appreciated gains of both realized and unrealized assets annually both in the US and Turkey. Moreover, raising tax revenue is not enough in order to tackle wealth and income inequality, but rather there should be enacted progressive transfers to assist low-income individuals, which is not effective without investment on education of low-income pupils in high poverty schools. Finally, this chapter will discuss about loose monetary policies that have been used during the pandemic both in the US and Turkey, which led to higher wealth inequality and inflation and will recommend a policy solution.

The US has allocated the largest stimulus packages to the tune of 3 trillion dollars, which could smooth the post-pandemic economy, boost businesses to enhance remote jobs and assist unemployed people to get new jobs (Lee 2020). Turkey, on the other hand, has declared a 100 billion lira stimulus package that will be directed for households in help, businesses, increasing minimum pension to 1500 lira and to exporting companies (Wheeler, Okutur, and Kacar 2020). Moreover, the Central Bank lowered the interest rate from 10.75% to 9.75% which will enable people to borrow more and to invest, but as was mentioned earlier, lower interest rate and more money into circulation, can increase the price level and inflation, which might worsen the inflation rate further in Turkey. Furthermore, Turkey has increased the minimum wage by 50% in 2022 to cover basic living costs, which will be increased from 2,826 liras (with previous exchange rate \$380) to 4,250 liras (with new exchange rate \$275) (Kozok and Yuksekkas 2021).

It can be argued that since countries have allocated large amounts of money, this will put much more obstacles for them to deal with income and wealth inequality issues, since they have to balance the budgets first and only then start assisting low-income people to overcome poverty. Thus, one possible solution would be to impose a one-time net wealth tax on the top 1% of wealthy people in the US and on the top 10% people in Turkey, which will enable to balance the budget for further investment needed for income inequality issues and at the same time will lower the wealth of the richest people that can reduce the wealth inequality gap. Obviously, there will be a tendency for the richest people for tax avoidance and tax havens. Therefore, a one-time net wealth tax can be a good solution so that large corporations did not have much time to move the businesses elsewhere. As an example, Argentina has recently imposed a one-time net wealth tax and could raise 2.4 billion USD, which could be a nice example for the US and Turkey to follow (Bloomberg 2021). In the Argentinian case, it was anticipated to raise much more tax revenue. However, many wealthy people objected to it, calling it unfair taxation, which led to only 2 percent of them to pay this new net wealth tax that amounted to 0.5% of Argentina's GDP. The raised amount of tax revenues will be directed as a recovery measure for health policies and to subsidize education, housing and businesses that can significantly assist low-income and middle-income individuals (Bloomberg 2021). Similarly, it will be as in the example of financial institutions in Germany, France and the UK, which were charged with one-year tax after the Global financial crisis, 2008-09 on national level to cover the expenses that were created by financial institutions during the Global financial crisis (Keller 2021). Obviously wealthy people are not guilty for the pandemic and rising income and wealth inequality, but this could be identical policy and for different reasons. Wealth inequality is as important as income inequality since wealth inequality is twice as high as on average than income inequality in OECD countries, where 10 percent of top individuals control

52% of total wealth, while total income controlled by 10 percent is only 24% (Balestra and Tonkin 2018, 7). It is also a highly topical issue because high wealth inequality boosts income inequality as the top 10% of individuals mostly have properties, businesses and more risky assets that bring a lot of income to them monthly (Balestra and Tonkin 2018, 7). The US has the highest wealth inequality in the world where 10% of Americans possess 70% of total wealth and the bottom 50% of the population possess only 2 percent of wealth as of quarter 1 of 2021 (Buchholz 2021). For Turkey it is somewhat similar where 10% of the population hold 67% of total wealth, whereas the bottom 50% hold only 4% of wealth (Duvar 2022). In both of these countries the bottom 50% own a tiny part of national wealth and the wealth of the top 10% is getting a larger share of almost 70% which is indeed alarming. Thus, for tackling high wealth inequality, enhanced progressive income tax cannot eliminate already accumulated wealth with addition of increased wealth during the pandemic, but rather can help reduce the income inequality. For tackling wealth inequality, what we need is certainly a wealth tax both in the US and Turkey. It can be one-time with up to 5%, but it can add a huge amount of money to the budget for redistribution aims.

In the US, the potential issue with net wealth is that for now it can be considered as unconstitutional, because wealth tax like income tax corresponds to direct taxes, which according to law should be apportioned based on population of state and any direct taxes that are not apportioned besides income taxes, will be unconstitutional based on the Sixteenth amendment of the US constitution enacted in 1913 (Bishop-Henchman 2021). As an example, if a state has got 20% of the total population of the US, then 20% of direct taxes should be paid from that state which is not a case for a wealth tax (Bishop-Henchman 2021). Thus, to introduce a wealth tax in the US, it should be legally implemented first and as wealth tax has no legal basis, it can be fulfilled by constitutional changes similar to how income tax came to be an exception after enactment of

16th amendments in 1913. The possible obstacles to implementing constitutional amendments could be that the top 1% of Americans in the US could impact on the decision of policymakers, through lobbyists, campaign contributions and think-tanks which are heavily funded by them (Nguyen 2021).

Meanwhile in Turkey, wealth tax was introduced only in 1942⁶ on non-Muslim minorities such as Greeks, Armenians and Jews to pay enormous amount of taxes which resulted in them selling all their businesses and properties to Muslim Turks under the slogan ‘Turkey for the Turks’ in order to pay their taxes and some of them were sent to freezing camps due to up to 232 percent of wealth taxes that did not allow them to pay full amount of tax and ended up to be very fatal (Sassounian 2020). It was controversial wealth tax as it was imposed disproportionately on citizens, such as Armenians with 232%, Jews 179%, Greeks 156% vs Muslims only 4.94% taxes to finance the army which also helped to liquidate non-Muslim-owned firms and to nationalize the Turkish Economy (Sassounian 2020; Ağır and Artunç 2019). After criticism from the UK and the US, the wealth tax was finally canceled in March 1944 (Sassounian 2020). Currently there is no wealth tax in Turkey as in the US, but only property tax, the tax on motor vehicles and the tax on inheritance and gifts (Investment Office n.d.). From the legal part, introducing a wealth tax is potentially easier in Turkey due to sweeping new power of the current president in politics that can be influential compared to the US which requires amendments in the Constitution and lobbying power of top 1% Americans.

There are several complexities in introducing a wealth tax. One complexity is that the top 1% of individuals hold vast part of their wealth in stocks and do not tend to sell them, since only after

⁶ Wealth tax originally was called as jizya tax imposed on kafir or infidel Turkey’s non-Muslim citizens. (Sassounian 2020)

selling, it will be taxed. On the other hand, they cannot be forced to sell their shares which is a bit complicated case. From an economic point of view, high income taxes distort people's behavior which affect further innovation. (Saez and Zucman 2021) However, tax on unrealized stocks cannot demotivate the owners since investment and gains have been already made and the owners will not have any incentives to affect on stock prices. Thus, unrealized gains of stocks especially gained during the pandemic can be also taxed as part of one-time wealth tax with lower rate of 3% for unrealized and 5% for realized, which cannot be distortive. This complication is mostly in the US as the top 1% and 10% of Americans invest heavily in stocks, but in Turkey according to Forbes it is slightly different where 85 out of the 100 richest Turks invest in properties including hotels (Forbes n.d. cited in Deggin 2015). Previously recommended policy can be also implemented also in Turkey, as there is a much smaller chance of capital flight or tax avoidance and since unrealized properties are not taxed now, it could be wealth taxed with lower rate of 3% compared to realized which is higher as 5%. Another challenge is a possible capital flight in case of introducing annual wealth taxes, which is not a case for one-time wealth tax since there will not be enough time for evasions, which certainly can generate significant tax revenues both in the US and Turkey.

Furthermore, European experience of introducing yearly wealth tax has shown that from 12 countries, only 3 countries left by 2019 that still have wealth tax, because other countries experienced a high amount of capital flight by leaving the country no taxes are being paid by these individuals (Zeballos-Roig 2019). The wealth tax in European countries failed because the threshold set for a wealth taxation, was indeed low at below \$1 million, which certainly should be much higher in order to target the top 1% of individuals as proposed by Warren to set the minimum threshold at \$50 million (Zeballos-Roig 2019). The rate of wealth tax was indeed lower than 1%

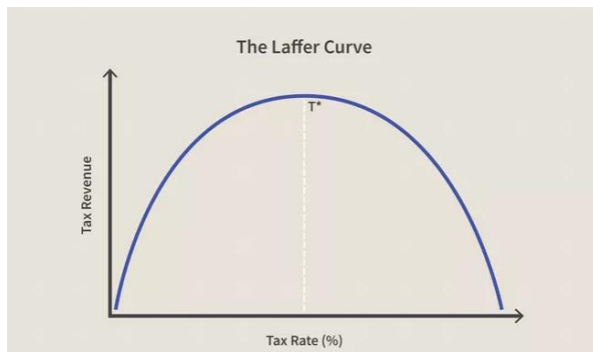
that did not generate sufficient tax revenue with addition to annual payment, which is also problematic since that forces taxpayers to leave. Thus, in the US the minimum threshold could be \$50 million, but for Turkey it could be lower because there are not much top 1% individuals, but rather more 10% of individuals, who should be targeted with rate of 3%-5%, one-time that can assist to avoid capital flight. Last but not least, not only the threshold should be higher, but mostly those individuals should be targeted who gained significantly during the pandemic.

The second proposed policy would be adding improvement on income taxes both in the US and Turkey by taxing appreciated gains from unrealized stocks and properties in order to combat the rising income inequality and overall wealth inequality. Currently the top threshold of income taxes are 37% and 40% respectively for the US and Turkey (Parys and Orem 2022; KPMG 2021), which is lower than the highest income taxed countries such as Ivory Coast (60%), Finland (56.95%), Japan (55.97%) and Austria (55%) (Trading Economics 2021 cited in “Highest Taxed Countries 2022” n.d.). Enhancing the progressivity to 45 or 50% for individuals both in the US and Turkey, can force them to leave the country to seek a more desirable environment with much lower or no income tax rates as in Monaco, UAE, Bermuda and Bahamas (Maverick 2022). However, US citizens cannot just simply avoid paying income taxes by immigration as there is a law that states that they must pay income taxes irrespective of their location, but US wealthy taxpayers could obtain another passport in more tax-friendly country, which has already been a case and has been tightened with expatriation tax that makes it extremely costly to renounce citizenship for Americans (Maverick 2022). Meanwhile, in Turkey only its residents⁷ are taxed on their global income, but non-residents are taxed only on their incomes in Turkey, which is easier for tax-avoidance compared to the US (KPMG 2021). Nevertheless, in both of these countries there is a

⁷ In Turkey a resident is the one who lives more than 6 months in a year. (KPMG 2021)

tendency for losing wealthy millionaires and billionaires if there will be a stricter and more progressive taxation system. Therefore, tackling wealthy people should certainly have some limits, that should not harm them much. In this regard, Laffer curve theory is indeed crucial to mention, since it shows the relationship between tax rate and tax revenue raised by governments.

Figure 11.



Source: Hayes 2021.

Arthur Laffer indicated that there is a maximum tax rate that maximizes tax revenue and if after that the tax rate is raised, tax revenue will decrease further on, as depicted on the provided graph. Tax rates can be from 0 to 100 percent and when tax rate is 0, there is no tax revenue raised, but also if tax rate is 100 percent, then tax revenue will also be 0, since no one will have incentives to work at all, as the cost of working will be much higher than having leisure at home.

Also, Laffer curve mentions that changes in tax rates can impact on tax revenues in two ways, which are short-run effect and long-run effect. The short-run effect is that once there is a lower tax rate imposed, tax revenue decreases. However, the long-term effect is vice versa, meaning lower tax rates provide individuals and corporations with more money for consumption and for building businesses, which leads to more spending, creating new jobs and more taxes that will be paid by a larger number of individuals. Accordingly, in the long-run lower tax rates produce a greater tax

base, which compensates the revenue that was lost in the short-run. Thus, enhancing the progressivity of income tax further on is not always a right decision in increasing revenue.

Nevertheless, there is an issue with income tax in a way that wealthy billionaires avoid paying income taxes by keeping vast part of their wealth in unrealized stocks, that is not taxed currently and there is high possibility that they can keep them unrealized way too long. In the US, it is indeed a topical issue, and there surely should be a new policy implemented. As was mentioned earlier regarding one-time wealth tax that taxes unrealized stocks with lower ratio of 3%, there should be a similar policy implemented as was proposed recently by President Biden (Watson and York 2022). According to President Biden's proposal, for individuals with a minimum net worth of \$100 million, their appreciated value of unrealized stocks should be taxed with a minimum rate of 20% annually, which could generate \$360 billion during a decade (Biden 2022 cited in Dennis and Wasson 2022). When the owners decide to realize their stocks in the future, previously paid taxes on those stocks will be deducted, so they will not have to pay twice (Watson and York 2022). Compared to the US, in Turkey top 10% individuals invest mostly in properties such as hotels, that generate capital on rents and are taxed on their capital gains. Also, property owners are obligated to pay annual property tax depending on its location in a big city or small and type of property that ranges from 0.1% up to 0.6% ("Turkey Property Taxes" 2021). Thus, as Turkey has a more progressive taxation system and the top 10% of its citizens invest in properties mainly compared to the top 10% or the top 1% in the US who invest in stocks that do not require new income taxation amendments in Turkey but only one-time wealth tax on both realized and unrealized wealth as in the US, as mentioned earlier.

Third, as taxation systems with new amendments would assist to generate more revenue in the US and Turkey, new policies should be enacted for redistribution effects towards investment in education of lower-income pupils and in addition in early childhood, pre-primary and primary education. As per Figure 10, the US have 7% of its GDP spent on pensions and only 1.5% of GDP on all other social areas including incapacity, unemployment, family benefits etc. and in terms of services it spends 8.4% of GDP on health and 1.2% on other social services including early childhood education and care services for children age 0-5, which slightly lower overall than OECD average as of 2018 (OECD 2020). Meanwhile, Turkey is a smaller social spender compared to the OECD average and the US, spending 7.4% of its GDP on pensions, 0.8% on other social areas including incapacity, unemployment, family benefits etc. and in total only 4% on whole service (OECD 2020). As per provided data, both the US and Turkey do not spend significant part of cash transfers and services on progressive benefits like family and particularly education, although without investment on education and training of poor people it is extremely hard to decrease wealth and income inequality in the long-run. Investment in education and training of poor people is crucial in the high tech era where higher skills play a significant role in finding a job. Especially it should be initiated by the government, as it was proposed in Brazil where the law required all federal universities to provide 50 percent of quotas to students coming from public schools in 2012, because many poor people graduated public schools and before this law the majority of students who were studying at Federal universities came from private high school (Andrade 2004). This policy was used because graduates of universities earned much more than those who only graduated from high school. Thus, this policy could bring poor people to study at universities and after all get a job which is paid the same as higher class people, which can serve as a means of increasing social mobility.

Nevertheless, investment should be not only in higher education but every level from the kindergartens should be touched upon. As of 2019, the US spent 11.6% of public funding on education, whereas Turkey spent 12.4% as of 2018 which are both lower than the global standard 15% set by UNESCO (Hanson 2022; UNESCO Institute for Statistics 2021 cited in World Bank 2021).

However, the amount of \$12,624 on average spent per pupil in the US is fifth highest in OECD and also the US is biggest spender on postsecondary education around \$33,180 per student in addition to \$14,418 per pupil spent on K-12 public education, which is 3.1% GDP as of data for 2020 (Hanson 2022).

Meanwhile, Turkey spent around 270.9 billion (\$38.58 billion) on education as 5.4% of GDP in 2020 (TurkStat n.d. cited in Ergöçün 2021). 31.9% and 24.9% of total education funding were spent on tertiary around 20,774 liras (\$2,954) per student and upper secondary education respectively and also total spending per student was 12,311 Turkish liras (\$1,753) in 2020, which is 19 times less than the US that is \$33,180 per student (Hanson 2022; TurkStat n.d. cited in Ergöçün 2021). It can be observed from both the US and Turkey that they are big spenders of total education funding on tertiary and secondary education. However, data on spending on early childhood education both in the US and Turkey is missing and is potentially insignificant, although early childhood education together with pre-primary and primary are significant parts of learning that became decisive in further development and success of children on secondary and further levels.

Secondly, low-income pupils study in high poverty schools⁸, which potentially have lower quality of education and less experienced teachers that leave low-income pupils behind, as was researched in 1,833 public schools in Virginia state of the US (The Commonwealth Institute 2014).

In addition, it was noted in the research that high poverty schools were less likely to offer critical science and math courses or any other advanced courses compared to the low poverty schools, which provided higher possibility of taking high level math and physics' courses to their pupils, which play a key role in entrance exams of universities. Furthermore, the researchers found that Calculus and Physics were offered nearly in all low poverty schools compared to high poverty schools, which provided the possibility of taking Calculus and Physics only to 57% and 43% of pupils respectively. Therefore, the differences in quality of public schools certainly are one of the main reasons why low-income pupils leave behind and cannot enter universities, whereas higher-income pupils after gaining qualitative education get into universities and end up having better jobs and higher salaries, which widens the income inequality gap in the US. Meanwhile, in Turkey similar phenomena was observed where pupils from poor families and poor regions of Istanbul attended schools, which had fewer financial resources, less qualified teachers and provided simple curriculum together with crowded classrooms, compared to higher income pupils which attended better qualitative schools (Ömür 2018). One of the second main efficient ways of redistribution effect is to fund high poverty schools both in the US and Turkey, which directly will assist low-income pupils, who afterwards can compete with higher-income pupils on entrance exams and further on the job market, which has long-term potential in decreasing the income and later wealth inequality gap.

⁸ High poverty schools are schools that have at minimum 75% of students who come from families with income lower than \$43,568 for four persons in a family and also are eligible for free or decreased price food in 2013-2014 vs low poverty schools which have only 25% of such students at maximum (The Commonwealth Institute 2014) .

Finally, loosening monetary policy was one of the main tools that many developed countries including the US, the UK and EU used to fix the post-pandemic consequences. As an example, in the US, GDP decreased by 3.4% in 2020, which was the biggest fall since 1946 (Fischer 2021), which forced the policymakers to undertake firm fiscal and monetary policies. One of the main parts of loosening monetary policy was lowering interest rates. The upper limit of Federal funds target rate⁹ was decreased from 1.75% to 0.25% by the Fed and the Fed also used forward guidance instrument which informed the public of the future low interest rate until unemployment and inflation rate will get to their initial level which eased lending process (Fischer 2021).

Furthermore, another main part of monetary policy was using unconventional monetary policy such as quantitative easing¹⁰, which was effectively used both in the US, the UK and EU. As an example, the Fed purchased large number of treasury and mortgage-backed securities from March 2020 to October 2021 enlarged from \$3.9 trillion to \$8.0 trillion (33% of yearly US GDP) and nearly \$750 billion of corporate debt which expanded the money supply in the market and provided significant cash to businesses and corporates to continue operating (Fischer 2021). In addition, for the first time in the history of the Fed was able to lend money to small, medium and large-sized businesses outside of the financial system. These policies certainly helped a lot of businesses and corporations in the US to quickly recover after fast and decisive actions of the Fed that was able to put large amounts of funds in the market. However, both quantitative easing and lower interest rates could significantly assist stock prices to flourish, since large-scale buying of bonds increases

⁹ Federal funds target rate is a target interest rate at which private banks are advised to lend to each other using excessive reserves (Chen 2022).

¹⁰ Quantitative easing is an unconventional monetary policy used by the Central Banks to increase the amount of money in the economy through buying big number government and corporate bonds together with stocks, which ultimately leads to lower long-term interest rates and lower cost loans (Jackson and Curry 2022).

the bond prices, but decreases bond yields as % of its price which makes bonds less attractive for investors and increases stock attractiveness that leads to stock prices increase afterwards (CMC Markets n.d.). Consequently, the top 10% and 1% were the main beneficiaries of such monetary generosity that witnessed huge spikes in stock prices and increased their wealth, as was discussed earlier, which increased the wealth inequality. Moreover, lower interest rates and quantitative easing on a massive scale, added huge amounts of cash in the economy, which increased consumer demand and money supply that contributed towards rising prices and inflation (CMC Markets n.d.). The Great Financial Crisis has taught Western countries a valuable lesson that policies should be fast and on a massive scale. Therefore, that was exactly what the FED representatives did, by reacting fast and using quantitative easing in massive scale, which certainly helped businesses to recover as compared to the Great Financial Crisis, but from another side it led to higher inflation and bigger wealth inequality gap.

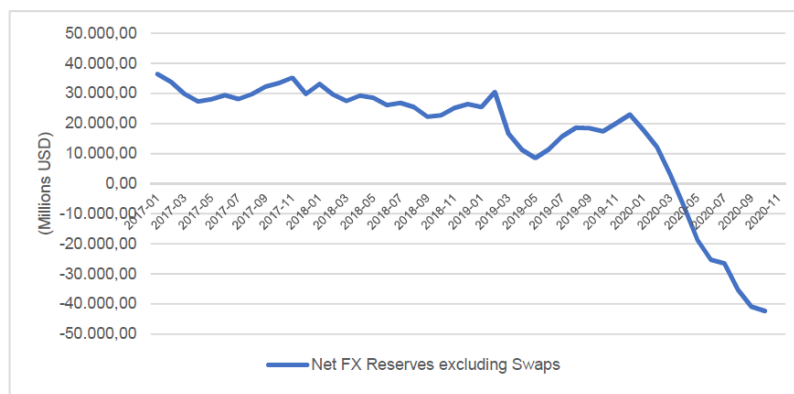
In the meantime, when the pandemic struck in 2020, Turkey already had high inflation rate and fiscal and current account deficits, but the pandemic worsened it after disruptions of Global supply chains and further depreciation of Turkish lira. (Çakmaklı et al. 2021) According to Çakmaklı et al. (2021) Turkey undertook some fiscal policies together with monetary easing policies including lowering policy rate¹¹ below inflation rate by Central Bank and pushing commercial banks to provide businesses with more cheaper loans and also selling the Central Bank's reserves of dollar¹² in order to stabilize the local currency, which led to 6.7% growth rate in the 3Q of 2020 but monetary policies could not stabilize Turkish lira and normalize inflation rate. In addition, Çakmaklı et al. (2021) added that since the beginning of 2020 Turkish lira depreciated by 40

¹¹ It is the interest rate at which the Central Bank is ready to lend commercial banks (Nasrudin 2019).

¹² Selling foreign currency by the Central Bank is used as an monetary instrument to put much foreign currency in economy so that local currency appreciated.

percent, which was also due to external debt that accounted 56% of GDP by the end of 2019, which makes foreign currency to flow out of the country than to flow in. Thus, possibly that was one reason why the Central Bank's plan of selling foreign exchange reserves did not succeed as depicted in figure 12, since a large amount of external debt flows out the currency and selling reserves cannot be enough.

Figure 12. Central Bank of the Republic Turkey's (CBRT) Net FX Reserves



Source. CBRT cited in Çakmaklı et al. 2021.

As depicted in Figure 12, foreign exchange reserves significantly declined from over \$20 billion to lower -40 billion USD since the beginning of 2020, although this monetary instrument did not succeed, and Turkish lira did not appreciate, which raises the debt burden of non-financial corporate sector that have revenues in Turkish lira. From another side, Turkish policymakers use depreciating Turkish lira to gain competitive advantages in their export, since their goods will be cheaper compared to foreign goods that helps to generate capital flows for the government to repay its external debts, although there is current account deficit in Turkey which harms significantly businesses that rely on imported goods (Çakmaklı et al. 2021). In addition, it was found by CBRT that 10% depreciation of Turkish lira raises inflation rate by 1.5% points and it is anticipated that

depreciation of Turkish lira on its own will raise inflation rate by minimum of 5% since 2020 (CBRT cited in Çakmaklı et al. 2021). Besides depreciation of Turkish lira, easing monetary policy which is lower interest rates and cheaper loans has been used in past years in Turkey that led to growth and high inflation rates, as was discussed in Literature review, and continued to be used during the pandemic which significantly increased inflation up to 61.14% in March of the following year, that is at its highest rate for last 20 years so far (Statista 2022a). The recommended policies both for the US and Turkey would be to get back to tightening monetary policies such as quantitative tightening for the US to sell most of the purchased bonds and increase interest rates until the inflation rate will not get back to its anticipated level of 2% which will also assist to lower wealth inequality, particularly affect those who benefited from increased stock prices in the aftermath of the quantitative easing's policies in the US. For Turkey, it is slightly harder due to its external debt and depreciating Turkish lira that increases partly inflation rate and puts additional obstacles for operating businesses, but what is certain is that Turkey should undertake tightening monetary policies as well particularly to increase Central Banks' policy rates which in return will increase interest rates and pause the growth, but for such alarming inflation rate it will be certainly helpful to decrease inflation rate, as higher interest rates are known for decreasing circulation money in the economy which decreases price levels.

6. Findings

Several main issues were found in this paper. First, the effect of the pandemic both on income/wealth inequality and inflation was significant. In particular, the pandemic has worsened income and wealth inequality both in the US and Turkey, as discussed earlier in the paper. In addition, inflation rose both in the US and reached up to 70% in Turkey as of April, 2022 (Trading Economics 2022a), due to the disruption in Global supply chains and unconventional monetary policy as a policy response, which led to lower interest rate and higher income/wealth inequality and inflation. Political externalities such as the war in Ukraine has also served as an additional trigger towards rising inflation especially in Turkey, which is dependent on trade with Russia and Ukraine.

Second, OECD countries' practice of wealth tax was not successful as it did not raise tax revenues significantly and led to tax evasion by the taxpayers. That was also as a result of annual taxation of the wealth tax which provides more incentives for tax evasion and moving wealth to tax havens. In addition, it is believed that the wealth taxation failed in most of the OECD countries, because of too low threshold and low rates for wealth taxation.

Third, the redistribution effects of cash transfers were found to not necessarily benefit low-income individuals, given its large share of spending on lifecycle benefits such as pensions and insignificant share of spending on benefits such as family and child benefits that precisely assist low-income people. In addition, Nordic countries achieved lower income inequality compared to

other countries of OECD, due to their transfer policies such as huge cash transfers which are more progressive compared to average OECD member states (Joumard, Pisu, and Bloch 2012, 25).

Furthermore, cash transfers on unemployment were found to be not much progressive, because they are more based on insurance and conditional on earlier contributions in most OECD countries (Joumard, Pisu, and Bloch 2012, 10).

7. Conclusion

Income/wealth inequality together with high inflation rate have been some of the main negative consequences of the pandemic, which rose significantly both in the US and Turkey. This paper undertook a comparative case study of Turkey and the US, which found evidence of rising income/wealth inequality and inflation and offered several significant policies that would help to normalize the situation. OECD's practice wealth tax has not generated much revenues and led to several countries also abandoning it in order to avoid capital flights and to boost innovation. Moreover, the redistribution effects of taxation were not precisely targeting low-income people across OECD that requires some amendments. This paper recommended a one-time wealth tax with higher threshold and higher rate including taxing both realized and unrealized assets in the US, which can contribute to lower wealth inequalities significantly. In addition, progressive taxation can be used to tax gains on both realized and unrealized stocks which will also be a historical move. Taxation policies are crucial, but without proper redistribution effects it will not produce significant results meaning lower wealth and income inequality. Thus, redistribution effects towards early-age education, pre-primary and primary education together with more investments in high poverty schools are crucial in this regard. Finally, after loosening monetary policies implemented both in the US and Turkey that led businesses to recover and at the same time produced bigger wealth inequality and higher inflation rate, tightening monetary policies should be used to get inflation rate back to its initially projected level and to reduce wealth inequality. Otherwise, further rising income inequality and high inflation can lead to a higher level of poverty that can be worse for humanity, if the recommended policies are not undertaken. Comparison analysis together with discovered case and policy recommendations contributed to literature by providing currently crucial policies needed for changes.

8. Policy Recommendations

As discovered deeply in methodology, based on the findings of this research, the following four policies are recommended.

First, given the large budget deficits in the aftermath of the pandemic, which forced many countries including the US and Turkey to make fiscal and monetary responses, a one-time 5% wealth tax on the individuals with over \$50 million should be imposed in the US. Moreover, as many in the top 1% in the US hold their major part of their wealth in unrealized stocks, unrealized assets should be also taxed with a lower tax rate of 3% as a one-time wealth tax. However, in Turkey due to the fact that the top 10% of individuals hold their wealth in properties such as hotels, they could be taxed given the price of the properties at the date of taxation, which should be taxed with one-time wealth tax of 3-5%, especially those individuals who gained significantly during the pandemic.

Second, appreciated gains of unrealized assets should be also taxed annually as a part of income tax in the US. In Turkey, it is easier given that the income generated from the rent of properties is already taxed. Appreciated gains of unrealized assets should be taxed as income tax with minimum rate of 20% for individuals with a minimum net worth of \$100 million, which could generate \$360 billion during a decade (Biden 2022 cited in Dennis and Wasson 2022). In addition, in the future when those unrealized assets will be realized, previously paid taxes should be deducted in order to avoid double taxation (Watson and York 2022).

Third, as a one-time wealth tax and improved income tax will generate significant tax revenues, the redistribution effects should be transferred efficiently to low-income individuals. In particular, one large part of public transfers should be spent on early-age, pre-primary and primary education

and on high poverty schools, which can be truly decisive for the success of low-income pupils in the future and can lower wealth inequality in the future.

Fourth, tightening monetary policy including quantitative tightening and higher interest rate should be undertaken until inflation rate will get back to its initially projected level both in the US and Turkey.

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