GENERALI INVESTMENTS

Core Matters
Inequality: Causes, policy response and market implications

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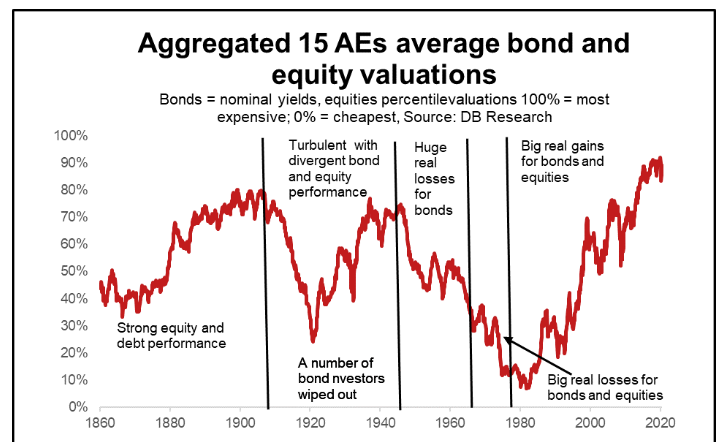
- Over the last 40 years, wealth and income inequality has decreased on a global level but risen substantially in Advanced Economies (AEs). There, the tails of the distribution have increased, hollowing out the middle class.
- Labour market forces have been instrumental. Technical progress, globalisation and the weakening of labour institutions have affected low and medium-skilled workers. Changes in the tax regimes have also benefitted capital over labour.
- To reduce tensions, enhanced labour market flexibility needs to be complemented by new a societal consensus (Social Contract) and corporate responsibility.
- In the short-term, pro-growth policies will continue to benefit risky assets. Longer term, the relative pace of monetary and fiscal retrenchment will be key for markets. Social and political pressure to tackle inequality will create headwinds for the return on investment, and possibly break, or reverse, secular disinflationary trends.
- Finally, while global companies embrace ESG at a faster speed, the "S" component is set to grow.

1. Introduction

Over the last decade, since the end of the Great Financial Crisis (GFC), more and more **adverse "side effects" of previously hailed economic, technological and political "megatrends"** have come to the fore. On the economic side, the most important megatrend can be dubbed a (second) era of globalisation, with the integration of large parts of the world (esp. Eastern Europe and Asia) into the US-led capitalist system. This process can be traced back to the early 80s. Technologically, computerisation has fundamentally changed the way we work and communicate; automation and artificial intelligence (AI) will deliver many more changes. Politically, the end of communist block and the opening of China has led to (at least temporary) more international cooperation while European integration accelerated. Finally, the economic thinking of Friedman and the Chicago School was put in practice in the 80s (Thatcher-Reagan) and conditioned the political framework.

However, these developments also laid the foundations of tensions that are likely to shape the upcoming decade. First, as we laid out in greater detail here, globalisation at least in goods trade has probably passed its peak. A fierce technological and political conflict between China and the US is threatening to divide the world again into bipolar (or tri-polar) influence spheres. Second, strong industrialisation and rising incomes resulted in increased pollution and global warming, exacerbating the trade-off between economic development and the preservation of the environment. Moreover, technical progress and the new division of labour between advanced economies (AE) and Emerging Markets (EM) has not been beneficial for everyone.

Technical progress and globalisation have fostered **rising inequality**, especially in advanced economies (AEs), while free market policies and fiscal consolidation resulted in weaker labour institutions and reduced social transfers. We see inequality at the core of the ongoing populist backlash. The US clearly looks at the forefront here, in both the inequality divide and the political tensions. Former President Trump's political fortune partly reflects the frustration of those "left behind". Populism has also risen in Europe as well as in other parts of the world, arguably for similar reasons. The EU has seen the loss of one-member country, the UK.



The problem runs even deeper. Rising inequality has gone so far as to thin out the middle class. The latter is often considered at the heart of **support for democracy**, sticking to

its legal rules and institutions.[1] Thus, rising inequality may open up the way to further populist nationalism, which we already see with the rise of right-wing parties around the globe. The Covid-19 pandemic has also laid bare the vulnerability of certain income groups and lasting effects on the labour market could well amplify the problem. Indeed, inequality additionally spikes up through recessions. A mitigating factor is represented by fiscal policy, which in many countries has reached out to support incomes and livelihoods.

Historical perspective: the concept of inequality is almost as old as humanity

Inequality is inherent with human nature: the first signs of (material) inequality appeared when humans started to domesticate plants and animals. The transition to farming-based societies introduced the concept of land ownership (and of landless peasants), a wealth accumulation booster, as humans began to pass it down from one generation to another. As farming societies grew, from small-scale horticultural famers to large-scale agricultural societies, the median Gini (see following box) grew from 0.27 to 0.35. The highest ever historical Gini score was in the ancient Old World (like Rome) at 0.59.

Inequality has been growing steadily over time except during some intense demographic shocks ignited by natural disasters (pandemics) or wars:

- Black Plague and Epidemics in South America
- Inequality in Latin America also briefly fell in the period of the riots and revolutions of the early 1800s.

However, the redistributive effect of these demographic shocks, was *structural*: as an example, **the Black Death exhausted the redistributive effect about a century after its outbreak** (1350-1450).

In what follows, we first take a deeper look into **the development and the current state of inequality**. We largely confine ourselves to economic inequality in wealth, income and consumption. These dimensions are often dubbed the "outcome" of inequality. By contrast, the "input side" comes under the header of a lack of opportunities (caused by gender, age, ethnical group, education, parental wealth/income background, place of living, etc.) combined with personal efforts. Causation is largely circular.

We then analyse **the main drivers of inequality**. We touch upon **the economic consequences of inequality and the impact of the ongoing policy response**.

Regarding the outlook, **we concentrate on a "reform scenario"** (as opposed to a social unrest scenario) in which the political response of the "disadvantaged" will pressure policymakers to embark on **increased redistribution**. The development of the labour market – as automation and AI create deeper structural changes – will be key, but it is the evolution of society as a whole that will primarily drive inequality trends (in the first and secondary income distribution). Fiscal policy will be a major driver; however, leveraging on it will imply increasing government spending, either financed by debt that will burden the next generation or neutralised by higher (real) taxation. Governments could also resort to a monetary financing of their deficits (as e.g. discussed by the Modern Monetary Theory, MMT). However, too high inflation is not beneficial for lower incomes. In any case, we expect distributional conflicts to rise.

Regarding markets, we differentiate the impact with regards to the time horizon:

In the short run, expansionary fiscal policies could be well received by markets, especially when coupled with a bold monetary policy. However, ultra-loose monetary policy could have distortion effects on wealth inequality (compare chap. 4f).

In the long run, it could well be the case that the capital share in total income will start to stagnate or even soften. History shows that asset returns come in long-term cycles (see graph above) and Western economies may be approaching an inflexion point. We do not wish for an abrupt drop as this was typically – as shown by the chart – associated with a war. Unfortunately, history teaches that distributional issues have often been the root of conflicts.

2. Inequality: Where do we stand?

Inequality is no uniform phenomenon and depends on the scope and level of aggregation; it may vary considerably among similar countries. We see a "hierarchy" in inequality with wealth measures the highest, followed by income and consumption. We first take a global perspective, then drill down into regional trends. We continue with a short section on the different income sources, then we focus on the G7 and selected countries.

a. Global level (across countries): benign inequality trend

On a global level, wealth and income inequality between countries has decreased over the last decades. This is to a large extent due to the rise of Asian economies, especially strong growth in China and India. The development mirrors the last wave of globalisation and changes in the global division of labour. "Simple" manufacturing jobs were moved from AEs to EMs. And while EMs benefited from rising industrialisation, AEs profited from lower prices. This also explains different regional trends and rising economic inequality (mainly) among high-income countries (see below).

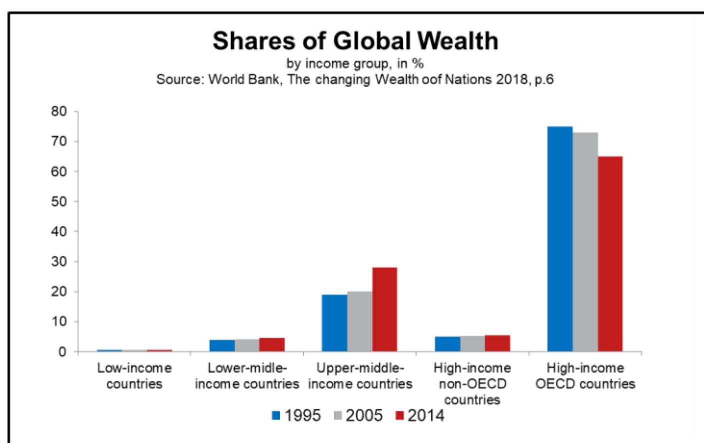
Wealth: According to the World Bank, global wealth increased by 66% from 1995 to 2014 (from US$690 tr to US$1,143 tr). In the process the share of middle-income countries surged from 19% to 28%. At the same time, the share of high-income OECD countries in global wealth dropped from 75% to 65%.

[1] M. Wolfe, Democracy will fail if we don't think as citizens, Financial Times, July 6, 2020

Measurement issues: Gini vs Percentiles

There are different ways to measure or summarise inequality. A first indicator is the Gini coefficient. It ranges from zero (perfect equality) to 1 (complete inequality), often multiplied by 100. The closer the Gini is to 1 (100), the more unequal the distribution. Within a country, the Gini coefficient may focus on the income of persons or households. Among countries, the Gini mostly relies on the average income per person or household. A variant weighs the national income per capita with the country's population. The main advantage of the Gini is its representation in a single number which allows direct comparisons over time and among countries. The main disadvantage is that the source of the change remains unclear: it could stem from the top, middle or bottom of the distribution. Generally, the Gini responds more to the bulk than to the tails of the distribution. Thus, additional information can be provided by special segments of the distribution. This can be specific quantiles (top 1%, 10%, middle 40%, bottom 50%), or deciles (10 pp steps) and percentiles. The main disadvantage is the necessary concentration on only partial information. This has led to the combination of different parts of the distribution, as in the "Palma ratio", which relates the share of the top 10% to the bottom 40%. Other combinations are also possible.

Distribution data have long relied only on surveys. More recently, other sources from national accounts, tax records and wealth rankings have been combined to improve the data. The most common data bases are the World Inequaliity Database, the Worldbank's PovcalNet and the OECD Income Distribution Database.



Income: According to the UN[2], relative income inequality among countries has also been declining. The Gini coefficient of international inequality[3] fell from close to 0.63 in 1980 to 0.53 in 2010. Again, strong growth in Asia has been the main driver. Nevertheless, absolute disparities remained extremely high, e.g. the average income of people living in the European Union is 11 times higher than that of people in sub-Saharan Africa. [4]

b. Distribution between labour and capital

The above-mentioned shares in wealth or Gini coefficients do not provide any detail about the sources of wealth and income. Wealth typically means ownership of capital, including physical assets (real estate, land) and financial assets, net of debt. In 2018, **the bottom half of the global population owned less than 1% of all wealth** while the richest decile (top 10 per cent) owned 85%, **the top 1% alone 50%.**[5] The shares of labour and capital income in total GDP have undergone marked changes. The wage share declined "in a majority of countries" (91 out of 133 with data) from 1995 to 2014 (ILO, 2016). **Improvements in labour productivity have not (fully) translated into better labour compensation**. Wage stagnation has harmed workers in the middle and at the bottom of the income distribution, who rely mostly on labour income.[6] Generally, low-paid non-standard contracts have been on the rise, lowering the income of the bottom decile. At the other end of the distribution, top salaries have also increased dramatically. In 2016, the average compensation of chief executive officers – including salary and bonuses – of the top 350 companies in the United States was 224 times that of the average employee's pay.[7]

c. Regional developments

UN data shows diverging regional trends. Inequality increased between 1990 and 2016 in 41% of the countries under review, representing 71% of the global population. **The main "victims" were developed countries**. Within this group (Europe, Northern America, Oceania and Japan) twice as many nations saw increasing disparities (26) as decreasing (13). By contrast, within Asia inequality was predominantly falling (in 12 out of 21 countries). However, **inequality has grown in the world's most populous countries: China and India**. Moreover, "countries and regions that enjoyed relatively low levels of inequality in 1990 have experienced rises in the Gini coefficient, and many countries that still suffer from high inequality have seen the Gini decline."

Trends in Income Distribution by Region

	Africa	Asia	Latin America and the Caribbean	Europe, N. America, Oceania, Japan	Total
Rising inequality 1990 - 2016	**13**	**9**	**1**	**26**	**49**
1990 - 1999	n.a.	7	12	4	23
2000 - 2007	n.a.	7	2	13	22
2008 - 2016	n.a.	4	1	14	19
Falling inequality 1990 - 2016	**16**	**12**	**17**	**13**	**58**
1990 - 1999	n.a.	2	4	4	10
2000 - 2007	n.a.	8	13	13	34
2008 - 2016	n.a.	13	13	14	40

No of countries by Gini trend, UN, World Social Report, 2020, p27

[2] UN, World Social Report 2020, p.22., the chapter draws strongly on the UN report.

[3] Calculated using population-weighted national incomes per capita.

[4] IN a different methodology, which does not use average per capita incomes but income of „world's people "directly, the World Bank found that global inequality (Gini coefficient) changed little between 1988 and 2008 (from 69.7 to 66.9) but then declined faster, reaching 62.5 in 2013.

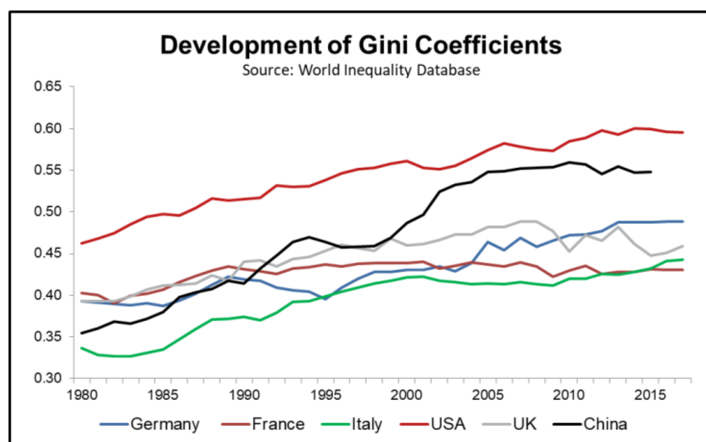
[5] Shorrocks A and al. (2018). Global Wealth Report 2018. Credit Suisse Research Institute, Credit Suisse, cited from UN World Social Report 2020.

[6] UN, World Social Report 2020, p.31

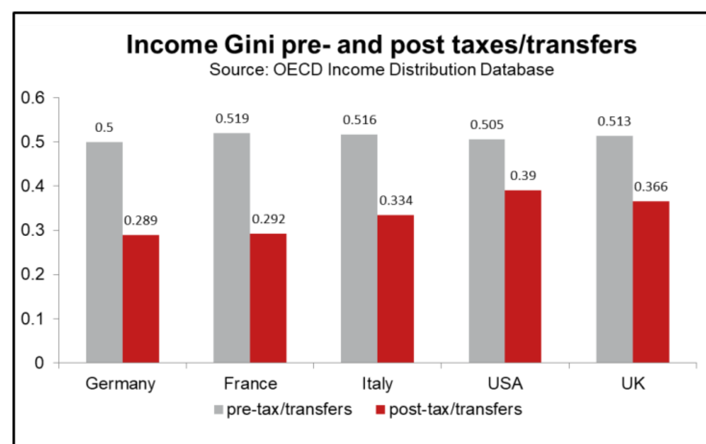
[7] cited from UN. UN, World Social Report 2020, p.32.

d. G7 countries development

Wealth and income: In G-7 countries[8], wealth and income inequality has generally been rising since the 1980s. In terms of wealth, the richest 1% of the population owned about 27% of the total wealth in 2014, about double the share of 1980.[9] Income inequality has risen as well. The (pre-tax) income share of the top 1% almost doubled from 6% to 11% from 1980 to 2014. Similarly, the Gini coefficient of disposable income has been mostly rising since the 80s.



Pre- and post-tax incomes: Tax and transfer policies have a significant influence on the disposable income distribution as well as on the relative poverty levels. E.g. France and Germany move from the highest 'pre-tax and transfer' poverty levels in G7 to the lowest following social transfers. On average, transfers brought the Gini coefficient for income inequality in the G7 in 2016 down from 0.49 pre-tax to 0.32 thereafter.[10]



Changes within income groups: G7 countries have seen diverging trends in real wages. Since 2008 they grew between 5% and 11% in Canada, Germany, France and the US, but stagnated in Japan and declined in the UK and Italy. Moreover, average wages hide different trends within wage earners. Real net income fell for 25% of people in six of the G7 countries (excluding Japan due to lack of data). 60% saw their wages grow more slowly than in the next richest decile. The middle class has suffered much over the past 40 years, despite the fact that the middle class is a much larger group than the "upper class". "The aggregate absolute income of middle-income households fell from approximately four times that of upper-income households in 1985 to less than three times by 2015. […]: in the United States, the share of adults living in middle-income households declined from 61% in 1971 to 50% in 2015"[11] (Of course the numbers depend on the definition of the income groups, pls see footnote.)

The following tables shed some more detailed light on the development of inequality in the US and some core EU countries. [12]

United States					
	1980	1990	2000	2010	latest
Wealth					
Share of top 1%	22.32%	26.36%	31.95%	37.80%	36.59%
Income					
Gini (pretax)	0.462	0.515	0.561	0.585	0.595
Share of					
- bottom 50%	19.74%	16.72%	14.64%	13.19%	12.67%
- middle 40%	45.56%	44.37%	41.39%	41.05%	40.55%
- top 10%	34.69%	38.91%	43.96%	45.77%	46.78%
- top 1%	11.18%	14.83%	18.39%	19.88%	20.52%

France					
	1980	1990	2000	2010	latest
Wealth					
Share of top 1%	17.21%	17.18%	28.11%	23.48%	23.38%
Income					
Gini (pretax)	0.402	0.431	0.438	0.429	0.430
Share of					
-bottom 50%	23.42%	21.43%	21.52%	22.28%	22.40%
- middle 40%	45.95%	46.38%	45.39%	45.11%	44.61%
- top 10%	30.63%	32.19%	33.09%	32.60%	32.99%
- top 1%	8.17%	9.33%	11.03%	10.84%	11.15%

Germany					
	1980	1990	2000	2010	latest
Income					
Gini (pretax)	0.393	0.419	0.430	0.472	0.489
Share of					
- bottom 50%	24.06%	22.81%	22.12%	19.52%	18.52%
- middle 40%	46.71%	44.93%	45.00%	44.93%	44.72%
- top 10%	29.23%	32.26%	32.89%	35.55%	36.76%
- top 1%	10.22%	11.15%	10.78%	11.95%	12.53%

Italy					
	1980	1990	2000	2010	latest
Income					
Gini (pretax)	0.337	0.374	0.421	0.420	0.442
Share of					
- bottom 50%	27.13%	24.67%	21.96%	22.11%	20.62%
- middle 40%	48.72%	48.56%	47.44%	47.43%	47.52%
- top 10%	24.15%	26.78%	30.60%	30.46%	31.86%
- top 1%	5.04%	6.17%	8.14%	7.82%	8.73%

[8] Canada, France, Germany, Italy, Japan, United Kingdom, United States
[9] KcKinsey Global Institute, Inequality: A persisting challenge and its implications, June 2019,
[10] McKinsey Global Institute, Inequality: A persisting challenge and its implications, June 2019, p8
[11] KcKinsey Global Institute, Inequality: A persisting challenge and its implications, June 2019, p38. "Middle income" households defined as households with income between 75% and two times the national median. "Upper income" households defined as households with income above two times the national median. Incomes are disposable incomes, corrected for household size. Data based on OECD.
[12] All data come from the World Inequality Database. Wealth data are only available for the US and France.

A few points stand out:

Inequality has risen between 1980 and recent years (2018 or 2019) in all G7 countries but to different degrees.

- **The US is clearly the frontrunner** with a wealth share of the Top 1% rising by 14.3 pp (more than double the increase in France), and the income Gini coefficient increasing by 0.13.
- The income distribution has changed the least in France. But all covered countries see **the income share of the bottom 50% and the middle class declining**. Latest data seem to be in part "better" than 2010. Possibly, 2010 was still much influenced by the Great Financial Crisis (GFC) and thus an outlier.

3. Major drivers for income inequality in AE

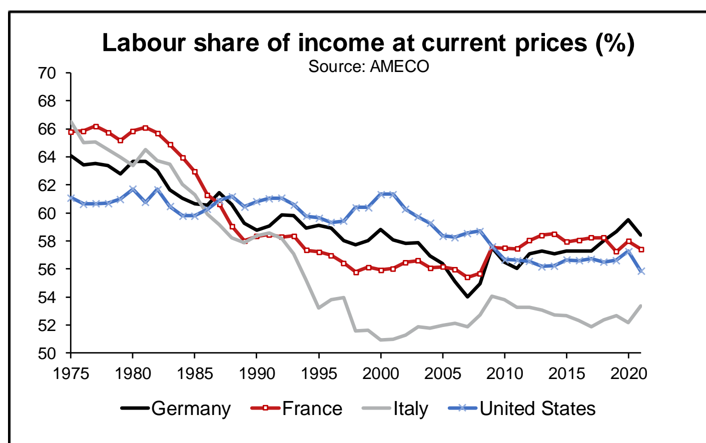
Why has inequality increased? What are the main drivers? We can distinguish between "pre-distribution" and "redistribution" factors. The first refer to the income generated by the market itself and rules that regulate it. The second refers to tax and benefits that moderate the unequal distribution of (primary) market incomes.

a. Pre-Distribution: Technical progress, globalization and institutional changes

Typically, there are two complementary groups of explanations: economic and institutional arrangements. The starting point for the economic drivers is the **decreasing share of labour in national income** (wages and benefits) since the 1980s, notably in AE.

As anticipated, a falling labour share implies that **real wages grew more slowly than average labour productivity**, reflecting a rise in the bargaining power of companies versus workers. Moreover, the decline in middle-skilled workers' income share was driven primarily by a drop in their relative wage and not in the share of middle-skilled employment.

Consequently, inequality tensions have built via two channels: First, lower-skilled and middle-skilled workers have incurred income losses in advanced economies; second, the top of the income distribution typically owns capital, hence an increase in the share of income accruing to capital tends to raise income inequality.



Piketty (Capital and Ideology, 2019, Harvard University Press)

Piketty argues that the main driver of inequality is the tendency of **returns on capital to exceed the rate of economic growth**. As long as this persists, the income and wealth of the rich will grow faster than the typical income from work. Capitalism, in short, has automatically created inequality. If economic growth was higher than the return on capital, capitalism would not create so much inequality. But, says Piketty, a repeat of the Keynesian era is unlikely: labour is too weak, technological innovation too slow, and the global power of capital too great.

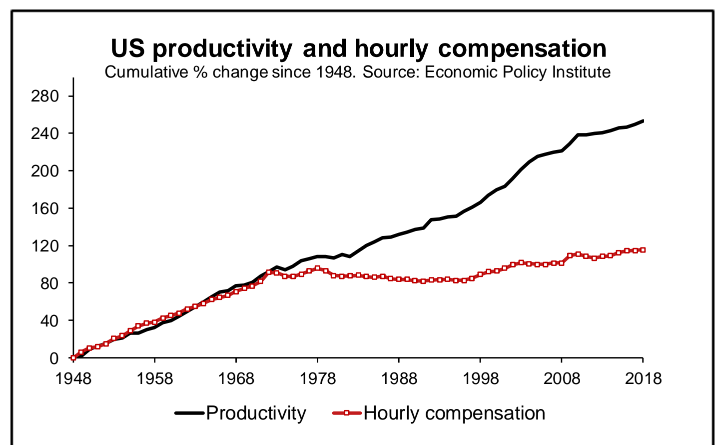
Stiglitz (Inequality, Wealth, and Capital, Queries 2015, Columbia edu):

"Piketty tends to use wealth and capital interchangeably. But wealth and capital are two distinct concepts; the former reflects control over resources, the latter is a key input into production processes. Much of the increase in wealth that can be observed from the 1990s onwards does not correspond to a rise in productive capital. More generally, a large fraction of the increase in wealth is an increase in the **capitalised value of rents**, not in the amount of capital goods. Such increases in "wealth" do not in general lead to an increase in productivity of the economy nor increases in wages. […]

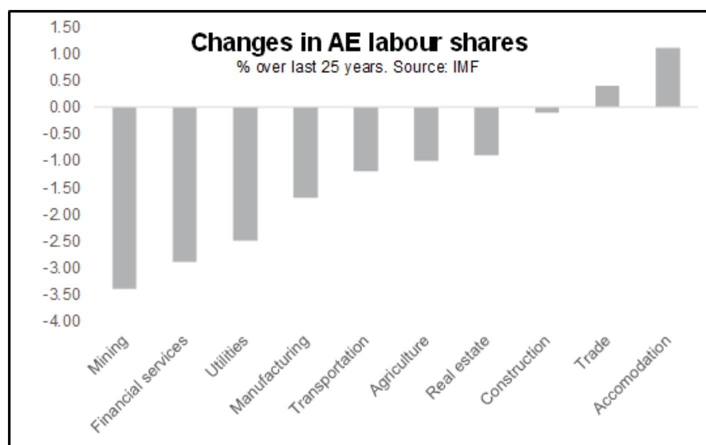
Equally important is how changes in financial regulations and monetary policy can lead to more wealth inequality. For instance, […] quantitative easing led to high stock prices — benefiting the owners of equity, disproportionately the very rich — but the low interest rate on government bonds hurt the elderly who had invested (they thought) prudently in government bonds."

"Inequality is not inevitable: it is a choice we make with the rules we create to structure our economy…"

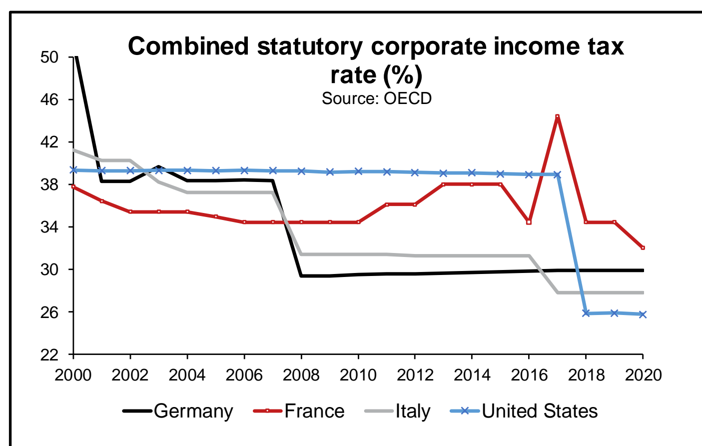
Those trends are largely routed, in our view, in technological advances combined with increasing globalization as well as the erosion of power of labour unions and market consolidation.



Technological progress/ Globalisation: The integration of EMs into the global value chains since the 80s generated a negative effect on wages in AE, especially for those low and middle-skilled occupations which were either "globalised" or replaced by higher automation domestically. Globalisation and automation are heavily intertwined (the fear of losing competitiveness drove many companies into further automation). Information and communications technology capital (ICT) and machinery and equipment are the group of capital goods that has led the decline in the relative price of investment goods, **inducing firms to replace labour with capital**. At the same time two important drivers of the cost of capital — the interest rate and the corporate income tax, set by policymakers — have declined substantially since the '90s as a consequence of competition among countries to attract capital. "Technological change disproportionately raises demand for capital and skilled labour over low-skilled and unskilled labour by eliminating many jobs through automation or upgrading the skill."[13]. Consequently, in some advanced economies, the automation of jobs has led to persistent losses of middle-skill occupations. This is the main explanation of the hollowing out of the middle-income class.[14]



Institutional and political factors[15]: Trade and financial integration benefitted strongly from the **removal of restrictions on international trade and capital mobility**. Of course, **labour is by its very nature much less mobile than capital**, thus the design of the global framework contributed to the reallocation of lower-skill, labour-intensive stages of production to cheaper locations in EMs. Domestic policy changes and institutional settings have additionally strengthened incentives to substitute capital for labour: on one side, **the declining corporate income tax rates**; on **the other the hollowing out of trade unions and the rise of the gig economy**, where no or very few guarantees are given to workers, lowered labour's bargaining power. At the same time, some trade agreements and rules decided in managing globalisation were set in order to boost protections for corporate profits, especially in the US: expansion of American intellectual property protections to other countries and new legal forums for multinational corporations to contest regulatory actions that could reduce their profits[16].

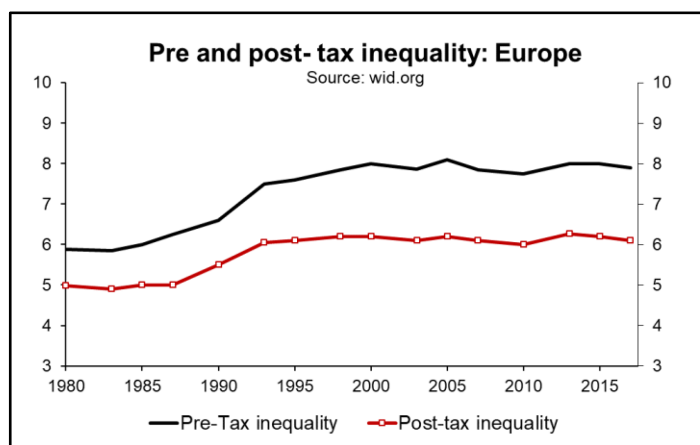


b. Redistribution: disposable income, wealth effect and inheritance tax

While market inequalities have increased, the role of income redistribution has remained limited: The national tax and transfer systems may significantly influence disposable income. However, income redistribution policies have not really been able to counteract the rising market income inequality:

- In most of EU and OECD countries, the **decline in the personal income tax rates (PIT) has** played a major role in reducing the progressivity of the personal income tax and the related redistribution capacity.
- The **reduction of PIT tax bases** due to the proliferation of **tax exemptions, has further exacerbated this trend.**
- **Taxes on corporate** and **capital income** are not only generally **flat**, but they also have seen a reduction in marginal rates **since 1980.** This has further reduced the overall redistributive impact of tax systems**.**

The following chart shows the results of those forces for Europe: income dynamics have been the main driver of inequality (the pre-tax ratio between top 10 and bottom 50 percentile of income distribution moved from below 6 in 1980 to almost 8 in 2017); distribution policies have partially offset.



[13] DB Research, Global Income and wealth inequality, January 2020

[14] IMF, World Economic Outlook, April 2017, chapter 3

[15] The mainstream explanation of globalization for AEs is that it has opened-up labour markets across borders, thereby lowering demand for unskilled labour, which, in turn, has pushed down wages. However, a basic power analysis of globalization's effect on wages argues that the way that economic globalization has played out is due to policy choices that favour corporate profit over labour protection.

[16] Rodrik, Dani. 2018. "What Do Trade Agreements Really Do?" Journal of Economic Perspectives 32, no. 2 (Spring): 73–90.

Wealth and the portfolio effect. Increasing income inequality affects the savings capacity and, in turn, fosters wealth inequality: higher savings accumulation typically implies higher investments in real estate and financial assets, and additional income sources from (light taxed) capital. Importantly, households' portfolios vary along the wealth distribution. Equity is highly concentrated among rich households while real estate is the typical middle-class vehicle. These portfolio differences are highly persistent over time. This implies that the top and the middle of the distribution are affected differently by changes in equity and house prices. In the US, after house prices collapsed through the 2008 crisis: the middle class suffered from substantial wealth losses, while the quick rebound in stock markets boosted wealth at the top. The recovery of house prices has been slow: by 2016, they were still 10% below their 2007 peak level. Lower house prices have contributed significantly to the 15% loss of wealth of the bottom 50%, relative to 2007 levels[17].

By contrast, the top 10% strongly benefited from the stock market boom and were relatively less affected by the drop in residential real estate prices. Such trends produced the largest spike in wealth inequality in post-war American history.

If increases in stock market prices primarily benefit the wealthy, it might be reasonable to assume that decreases in the "risk-free" interest rate hurt those with low and middle incomes who have savings accounts or safer asset investments (See also section 3.f for further discussion of Central Bank role).

Wealth redistribution: the blunt weapon of inheritance tax. Inheritance tax dates back to the Roman Empire, which collected 5 percent of inherited property to fund soldiers' pensions. Principally, **taxation of inheritance** may be used to reduce wealth inequality. However, its revenues only **account for a small portion of total tax revenues**: among OECD countries, inheritance tax (plus gift tax and estate tax) only makes up **0.1% of GDP**, while total tax revenue accounts for 34.3%[18]. Several OECD countries abolished inheritance tax (Austria, Czech Republic, New Zealand, and Portugal). Even Sweden and Norway, among the most egalitarian countries in Europe, have abolished it. Where still in place, the presence of **exemption rules[19]** and **low marginal tax rates** result in low fiscal revenues even when the inheritance tax is progressive. Major hurdles for inheritance tax to play its role in tackling inequality have been the high level of **administrative costs, double taxation issues, fairness with respect to middle-class individuals and the risk of seeing wealth fly to more tax-friendly jurisdictions**.

Inheritance Tax in Europe	Y/N	Tax rate
Austria	N	
France	Y	5-60%
Finland	Y	0-33%
Germany	Y	7-50%
Greece	Y	1-40%
Ireland	Y	33%*
Italy	Y	4-8%
Netherlands	Y	10-40%
Norway	N	
Poland	Y	0-20%
Spain	Y	7.65-81.6%
Sweden	N	
UK	Y	20-40%

Inequality of opportunities and social mobility (see for reference UN, World social report 2020, Inequality in a rapidly changing world)

So far, we have covered inequality from an outcome point of view. That is inequality of income and wealth. There is however another way of considering inequality, i.e. the inequality of opportunities: inequalities based on age, sex, disability, race, ethnicity, origin, religion, and economic and other status. This leads to group-based disparities in several markers of well-being, including poverty, health, education and employment. However, one's chances to succeed in life should not be determined by circumstances beyond her control. Including equality of opportunities can help explain why income inequality could bring lower economic growth. In economies characterized by intergenerational rigidities, an increase in income inequality has persistent effects — for example the hinderance of human capital accumulation — hindering future growth. In economies characterized by low equality of opportunity, income inequality exerts a greater drag on growth because of various market failures connected with social stratification. **In particular, if there is an unequal access to education or if the access to the labour market is not transparent, human capital cannot develop, talent is misallocated, and slower future productivity growth will follow.**

4. Economic outlook and implications

a. Inequality and Growth

Various papers show that income distribution may matter for growth. A full review of this line of thinking is beyond the scope of this paper. However, in a rough sketch, inequality and GDP growth are considered not to be independent from each other. E.g. an IMF paper shows in a sample of 159 advanced, emerging, and developing economies for the period 1980 until 2012, that "a higher net Gini coefficient ([…] (which) nets out taxes and transfers) is associated with lower output growth over the medium term [...] We find an inverse relationship between the income share accruing to the rich (top 20 percent) and economic growth." Precisely,

[17] Moritz K., et al., Asset prices and wealth inequality, VOX, 2018.

[18] M. Drometer et al., Wealth and Inheritance Taxation: An Overview and Country Comparison, IFO, 2018

[19] As an example, in Italy the exemption regime implies no taxation for bequests lower than 1 m euro. Moreover, life insurance policy reimbursements are not included in the *de cuius* total wealth.

the study suggests that a rise in the income share of the top 20% by 1 pp decreases growth by 0.08 pp in the following five years. Conversely, an identical in-crease in the income share of the bottom 20% is associated with an increased GDP by 0.38 pp.

b. Inequality and rising populism

Despite the post-GFC (Great Financial Crisis[20]) economic recovery, Western democracies have been increasingly confronted with a rise in national populism. “Recent data show that there is a **direct correlation between these [voting] manifestations […], or the cracks in the social contract,** and the emerging distributional tensions described above. For example, the group of workers penalized by recent shifts in the demand for skills appear to be voting more regularly for extremist parties. There is also evidence that polarization of the voting is related to regional welfare disparities. And younger generations are opting out of the system by not voting, as shown by their declining turnout at elections across Europe.”[21] After 2008, the US economy saw its longest recovery period ever. Nevertheless**, despite the recent Biden win, support for Trump remained strong** among the “disadvantaged” and in declining regions. It even rose among black voters, despite the “Black Lives Matter” movement. The economic and political divide further increased. People discouraged by **lower wages, lower quality jobs and unemployment have turned to nationalist populism**. While the US may be the front-runner of this trend, it is not alone. Europeans (and EMs) have been affected as well, e.g. in the Brexit vote, and the 5SM plus the Lega parties in Italy, the AfD in Germany and the Front National in France. The current Covid crisis is accelerating the problem. The IMF showed that **previous pandemic experiences** (SARS 2003, H1N1 2009, Mers 2012, Ebola 2014 and Zika 2016) **increased inequality** by 1.5% in the following 5 years for the 175 countries observed[22].

We see the **problem rooted in the development of the labour market** in response to a lower demand for medium-skilled workers, and fear that further automation and AI will aggravate it. What can politicians and enterprises do? Elements of response are already there. **Policies aimed at containing inequality** have gathered momentum recently and could further help to change the secondary income distribution. In what follows, we discuss the role of the labour market, the need of a new social contract, and the role of education. We will address pressures which could arise on companies. We will elaborate on what we think will be the most probable way in which inequality will be addressed, the one we call a reform scenario, but other, less benign developments cannot be ruled out.

Covid and Inequality

The Covid pandemic will have many consequences on the global economy in the short and in the long term. The vulnerabilities of globally connected supply chains have become apparent. Countries could not even internally provide enough supplies of simple things like masks and gloves. **Resilience** was heavily under test and could become the new objective of economic policy. This would translate in a process of shortening the supply chain. In terms of inequalities, they increased both between countries (even if we cannot say between AE and EM) and within countries. As in any recession, the low and middle skilled jobs bore the brunt. Moreover, lockdown and social distancing in place hurt even more low paid jobs, such as workers employed in food preparation and serving-related occupations, in tourism, in personal care and service, in entertainment. The prompt reaction by central banks by loosening monetary policy could help sustaining employment and making the funding cost of houses more affordable. However, it can have a distortive effect, pumping inequality as it pushes up equity values, mainly held by the wealthiest, and depresses saving returns on safe assets held by households. Moreover, because of Covid, much debt has been piled in and inequality may increase because of it according to whom will repay for that debt. Last, tech titans, such as Apple, Amazon, Alphabet, Microsoft and Facebook have benefited from the pandemic, increasing their market weight, versus small companies and workers, and the wealth of their shareholders. Apart from the angle of inequality on income, we can see the Covid crisis through the lens of inequality of opportunities: health, education, race, age, gender. In terms of health, Covid had a higher impact among those who had worst health conditions; moreover, it will increase non-communicable diseases since their prevention and treatment have been severely disrupted. This is particularly true for the poorest. **Education, which is among the main driver a society could leverage on to reduce inequalities,** has been put at risk: The supply of it has been interrupted and, when not, the quality has decreased. Regarding race, data from the US leave no doubts and can be seen as an example. Mortality rates, income decrease, education disruption has been higher for Black Americans (see: Racial Economic Inequality Amid the COVID-19 Crisis, Bradley L. and al., The Hamilton Project). In terms of age, younger workers are more likely to have lost their job or experienced a drop in economic activity that is likely to result in a reduction in earnings during the lockdown. For what regards gender, women are potentially more at risk of infection because they make up most healthcare workers (76 % in EU). Women are more likely to be in temporary and precarious employment, with lower pay, weaker legal protection and difficulties accessing social protection. Lastly, their unpaid workload (globally 76.4% of the total amount of unpaid care of work) is likely to have further increased (see: COVID-19 and Inequalities, R. Blundell and al., Institute for Fiscal Studies).

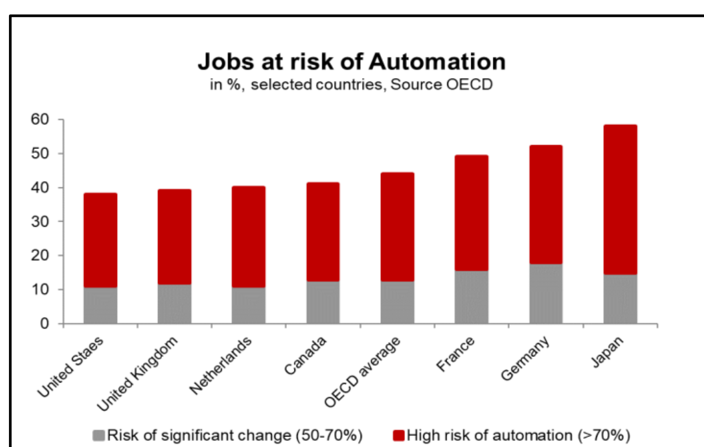
[20] In the past, a broader awareness of inequality issues was typically associated with crises periods when distributional conflicts rose but decreased in phases of stronger participation in higher growth. This pattern looks not too much valid any more.

[21] World Bank Group, Toward a new social contract, Maurizio Bussolo, María E. Dávalos, Vito Peragine, and Ramya Sundara, 2019.

[22] Davide Furceri, How Pandemics Leave the Poor Even Farther Behind, IMF, 2020

c. The labour market, education and social protection: headwinds and reforms

In our view, labour market trends will be decisive. On the one hand, job security and the stability of income rank high in the way people perceive equality and stability. On the other hand, flexibility in labour markets is needed to achieve a new, efficient resource allocation, which is the basis of higher potential growth. Yet **changes in the labour market are forecast to become ever more disruptive.** Automation and AI are still only in their infancy and expected to affect large portions of the workforce. Advanced skills will become ever more important and so will the skill premium. By contrast, demand for medium qualification could decline, resulting in more wage pressures in the non-tradable domestic service sectors. Moreover, the traditional employer-employee relationship (i.e. subordinate work) will likely lose importance. Both trends could further hollow out the middle class and lead to a further rise in inequality.



Consequently, the discussion about **elements of a "new" social contract** has gained prominence. The term "Social contract" has a long philosophical and sociological history, which we will not discuss here. The social contract organises the protection of the society's members in exchange for them to keep respecting the 'rules'. We follow here the suggestions of the World Bank which sees three principles:[23]

- Promote labour market **flexibility**, while maintaining **protection** for all types of labour contracts.
- Seek **universality** in the provision of social assistance, social insurance, and good-quality basic services.
- **Expand the tax base** by complementing progressive taxation on labour incomes with taxation on capital.

These principles are geared to tackle the growing divide between highly skilled and "normal" labour and address the segmentation of the labour market. They also decouple social protection to some degree from being employed (from the classical employment career), ranging from health to education and pensions. Of course, this "decoupling" of social security from working status (currently social insurance typically depends on a labour contract) does not come for free. Governments that increase public spending can either resort to **public debt** (i.e. leave the problem to future generations and thus increase intergenerational inequality) or – at least over the medium term – **raise taxes**. Principally, the government could also resort to **monetary debt financing**, if this were institutionally (central bank independence) feasible. We discuss this question in the next chapter but do not see it as a fundamental solution.

Moreover, the role of education needs special attention. Providing higher education is a fundamental prerequisite for the participation in an ever more knowledge-driven economy. Increasing higher education should allow more people to fit into rising job demands in (technologically) advanced occupations. Improving the quality of education and making it more accessible are important prerequisites. Otherwise better-off families can fund private, supplementary forms of education for their children, thus contributing to rising inequality. Needless to say, all this is challenging and not without pitfalls. First, (fortunately) personal gifts vary and may not fit well into mathematical/technical demands. Secondly, and more importantly, **there may be a "fallacy of composition"**. While individual improvements in education may increase opportunities, more people doing this (the macro level) may reduce the scarcity of the qualification and lead to a drop in the skill premium - impairing the guarantee of higher income.

d. Modern Monetary Theory: Could money printing be a solution to inequality?

Modern Monetary Theory (MMT) is a heterodox macroeconomic approach that drew some attention due to its non-standard view on government finance. It **"encourages" some form of monetisation of deficits, thus preventing an increase in the government floating debt stock and the risk of some sovereign crisis, going forward.** The framework has gained popularity among some Democratic politicians in the US (Sanders, Ocasio-Cortez). Basically, MMT is much less cautious in the of use monetary-financed government deficits to reach full employment. This relies on the view that monetarily sovereign countries (such as the US) are monopolists in their currency (given a flexible exchange rate). To be fair, the theory targets a severe crisis and underemployment situation (like in the current Covid-19 crisis) when inflation risks are low due to a large output gap.[24]

This situation is not too much different from existing monetary policy practices such as the yield curve control (in Japan and others), where the central bank neutralises upward pressures on yields by buying the necessary amount of government bonds. However, once the economy has reached full employment, MMT recognizes inflation risks as idle capacities have disappeared. **De Grauwe and Diessner[25] have (independently of MMT) estimated the hypothetical inflation from monetising the Covid-19 related euro area deficit** of 7.5% of GDP in 2020 and 3.6% in 2021 (IMF Fiscal Monitor's April 2020 forecasts) which at current prices translates into roughly €900 billion and €400 billion for 2020 and 2021. Using the money multiplier and the

[24] World Bank Group, Toward a new social contract, Maurizio Bussolo, María E. Dávalos, Vito Peragine, and Ramya Sundara, 2019, p15

[24] Like in a Keynesian diagnosis, monetary policy is rather helpless in a depression as investments become interest rate insensitive (liquidity trap). Thus, fiscal policy is the tool of choice while its financing via the printing press minimises any crowding out effects.

[25] De Grauwe, Paul; Sebastian Diessner What price to pay for monetary financing of budget deficits in the euro area , CEPR, 18 June 2020

quantity theory of money together with IMF/EC growth forecasts, they estimate that a "**monetization of deficits has the potential to produce inflation to the tune of 4-6% for 4 to 6 years from 2021 or 2022 onwards**". Inflation would start to rise only when the large output gap has narrowed, and assuming the ECB does not take any liquidity back.

To discuss the details of this approach would go much beyond the scope of this paper. However, we want to stress one important point. **MMT is basically a business cycle theory while inequality issues, in our view, are political and structural in nature[26]. While governments may use MMT to avoid unpopular tax increases for some time, we do not see MMT as a useful tool to permanently change the secondary income distribution[27]**, at least in the long run. In fact, low income earners are more exposed to substantial inflation than higher ones. Thus, hoping that inflation would help tackle inequality seems counterintuitive.

e. Pressures on companies: from shareholders to stakeholders

Nobel-prize winning economist Stiglitz argues that inequality is self-perpetuating as the wealthy hold a vast amount of political and economic monopoly power. Such power is used to incur favourable treatment by the government and reduce the tax burden. Can this status-quo be challenged?

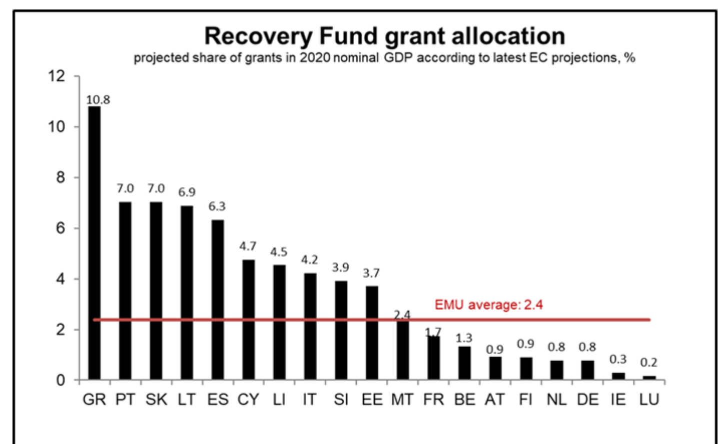
Stakeholder value to increase? To disincentive corporate behaviours that give too much priority to short-term profits, various actions are possible. This could include **disincentives for short-term or stock-price-dependent CEO contracts**. Other options include conditions regarding significant layoffs, productive investment targets, or limits to the wage dispersion among managers and non-managers. **Essentially, this would also mean a shift from the shareholder- to the stakeholder-governance model.** Of course, there is a fine line between measures to reduce inequality and an unwarranted concentration of power and blunt market interventionism.

Anti-trust and legislation pressures to increase on monopolistic sectors: Market monopoly undermines innovation, productivity, and the efficient use of resources. Under an OECD model, "market power and higher prices increase the wealth of the richest 10 per cent of the population in eight OECD countries by between 12% and 21%, while at the same time reducing the disposable income of the poorest 20 per cent by between 14% and 19%". The results suggest that competition may help to reduce economic inequality"[28].

Antitrust enforcement could thus redistribute wealth without incurring the traditional shadow costs arising from taxation. Antitrust policies have not been very successful in the last decades. Merger and Acquisition should be monitored to prevent that market power gains dominate efficiency benefits. In particular, growing monopolistic powers in the tech (communication, on-line retailing) sectors should be scrutinized, possibly by creating a new "Digital Authority" to enforce privacy laws and protect consumer data. The European Commission signed on December 9 the **Digital Market Act and the Digital Service Act**, to "propose ex-ante rules covering large online platforms acting as gatekeepers, which now set the rules of the game for their users and their competitors." Moreover, France has pre-announced a **Web tax**, and the European Commission is ready to follow that same path, in case OECD negotiations fail.

f. Cross-country solidarity

EU recovery fund: Politicians have realized that supranational arrangements like the EU may only survive if they are perceived as **supportive for "everyone"**. In this regard, the EU recovery fund – with a volume € 750bn including grants – has been acknowledged as a welcome expression of solidarity against the background of the Covid-19 crisis (in exchange of structural reforms). Markets celebrated the relief for the debt capacity of Southern European countries. Nevertheless, a more permanent form of solidarity and risk sharing at EU level still appears elusive.



g. The Biden administration

Upcoming US policy: US Democrats favour another large Covid-19 support package. The Biden election platform has already elements of tax increases for capital. He has proposed raising the capital gains tax rate from 20% to 39.6% for those making over US$ 1m after 2022. He would also increase the corporate tax. Moreover, the program focusses on higher marginal top income tax rates. On the spending side it envisages higher outlays on education, infrastructure and healthcare, tighter regulations for energy, financials and emissions. It remains to be seen, of course, how much will be delivered given the smallest possible Senate majority and limited political capital for centrist Democrats facing the 2022 mid-term elections.

h. Monetary policy

Fed and ECB stance on inequality: On the monetary side, the Fed's strategic review has likely made the policy stance more accommodative. Most interesting in terms of inequality, the new objective made explicit reference to more inclusive employment gains (with a focus on low-income jobs)[29].

[26] For instance, the US reached "full" employment with an unemployment rate below 4% within the years up to 2020. Yet, the Gini coefficient continued to trend upwards. Thus, to use money printing cannot rectify distributional issues beyond cyclical problems.

[27] A monetary forced depreciation of the currency may allow for some structural change. However, other countries will not easily accept a loss in their competitiveness. Thus, strong international turbulences (similar to a depreciation race) seem likely.

[28] Inequality: A hidden cost of market power, OECD, 2017

[29] Powell J., New Economic Challenges and the Fed's Monetary Policy Review, August 2020, Federalreserve.gov

The position of the ECB is that "[…] an APP shock in the euro area decreases income inequality. It also decreases wealth inequality, although to a negligible extent". [30]

Monetary policy impact on inequality: In reality, the impact of monetary policy on inequality is far more controversial. Ultra-loose monetary policy aims at stimulating the economy. Indeed, especially during downturns, the lowest deciles of the income distribution tend to suffer more. But monetary policy also has **side effects** independent of the business cycle. Low interest rates over an extended period **put pressures on pensions**. Moreover, ultra-low policy rates and money printing tend to support asset price inflation. **Rising asset prices benefit the wealthy**

Yet, there has been little academic and empiric research on this important question. In contrast to ECB claims, for instance, recent studies found that QE seems to be modestly dis-equalising, as asset price effects dominate positive impacts on employment and mortgage refinancing[31]. A recent research paper discusses whether the central bank should tackle inequality within its actual policy function. A recent IMF [32] study finds support for making inequality an explicit target for monetary policy, particularly if central banks follow standard Taylor rules.

5. Market implications

Direct market implications of a complex and long-term phenomenon like inequality are not easy to pin down. We see three dimensions. **Firstly, to buffer the rise in inequality by the current pandemic,** we expect a continuation of pro-growth policies including rising transfers and supportive monetary policy, in part completed by selected structural reforms in the euro area. Thus, **a short-term effect** – a "reflationary" one - should be positive for risky assets and stock markets in particular, notwithstanding the issue of high valuations based on market multiples.

Second, **in the longer run**, rising transfers, the expansion of social coverage (if our benign scenario comes true) and higher state presence in the economy imply a less efficient allocation of resources and rising government debt. The latter could mean **higher taxes**, including corporate tax and taxes on capital income, thus reducing stocks' returns further out.

Lastly, there is also a qualitative dimension of market implications that we see in a rising application of **ESG** criteria for investments. These criteria have already gained much prominence recently, and we expect this trend to continue, propagating from Europe to the US (with Biden) and EMs. The social component of the ESG complex is likely to become heavier.

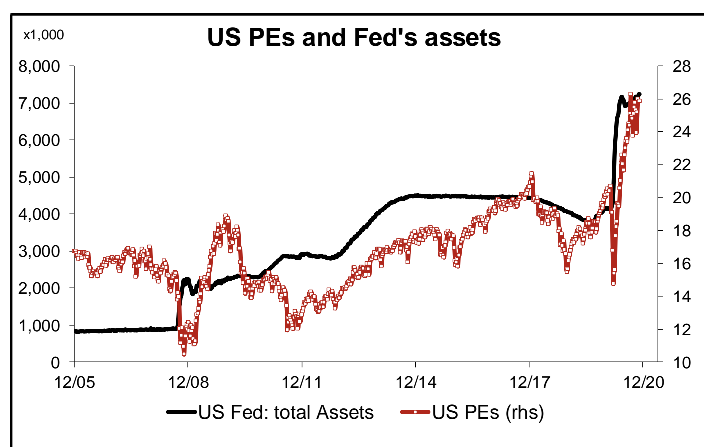
a. Short term: expansive monetary and fiscal policies

Bold policy action is set to keep equities at higher-than-historical market multiples. Short term, equities are set to rise further, with further **rotation** towards Value and Cyclical styles. **Earnings** will rebound strongly in 2021 and 2022 thanks to persisting policy support, the availability of the vaccine and a lingering economic recovery. Furthermore, while rebounding from 2020 lows, both bond yields and credit spreads will remain muted on a historical comparison. We assume that central banks will act to contain the rise in real yields, which would be most toxic to financial conditions. Capping real yields should help keep **equity multiples higher than norm, albeit below recent peaks (see chart). The continued rise in profits will then support positive returns on equities, in the coming year.**

Indeed, in the EA in particular, it is the first time that a bold **anti-cyclical fiscal policy** adds to a strong monetary accommodation. This should result in a higher positive multiplicative effect on the GDP and a strong earnings recovery in 2021 (+40%) and 2022 (+15%).

In the US, Biden's policy will be even more "reflationary" than Trump's, implying slightly higher US rates and a steeper yield curve; this will not necessarily be a negative for stocks, as we forecast solid earnings growth (+15% both in 2021 and 2022 for the S&P 500), but will promote instead a style rotation into cyclicals and value stocks, countries (EA, UK, Japan and EM) and sectors (industrials, financials, materials, energy): shorter duration assets will outperform longer duration ones.

Cyclical and Value stocks can indeed continue to outperform as they have the highest historical positive correlation to rising yields and inflation, to commodity prices and, finally, CPI and PPI inflation. On the contrary, Defensive and Growth sectors are characterized by a negative correlation to the same macro variables.



b. Longer term: Lower investment returns

Recently, the word was out to dub the next ten years (pessimistically) the "age of disorder". [1] **History shows that asset returns come in long-term cycles. After the very favourable returns of the last decade, Western economies may be approaching an inflexion point.**

As already outlined above, we expect the upgrading of the social security system to eventually lead to higher tax rates

[30] Michele Lenza and Jiri Slacalek, Quantitative easing did not increase inequality in the euro area, ECB Research bulletin no. 54, 2019

[31] Juan A. Montecino & Gerald Epstein, Did Quantitative Easing Increase Income Inequality? 2015. Working Papers Series 28, Institute for New Economic Thinking.

[32] Hansen N. et al., Should Inequality Factor into Central Banks' Decisions?, IMF, 2020

and/or **a broadening of the tax base towards wealth and investment income**. This would come in sharp contrast to countries previously competing for investment with more favourable tax policies. Such trend reversal may happen under increased political pressure from the “disadvantaged”. The process would be easier to implement with international cooperation. However, should national populism grow, as we suspect, international cooperation would struggle to recover from the Trump era. **In sum, we would not expect the process to be smooth and easy**.

Headwinds for corporate margins may not consist in just higher taxes: structurally low nominal GDP growth, increasing wage costs, antitrust measures and diminishing international tax arbitrage could all be drags.

All this may contribute to lower future earnings growth and **stock market total returns compared to the last 20 years, in the range of 5%-6% for the next 5 years compared to 6%-8% in the last 20 years** (and 15+% on average for the S&P over the past decade).

In terms of sectors, the inequality theme could play in favour of those providing **food, health equipment & services, Med-tech, pharma, technology as an accelerator of education,** and whose activity is not under the lens of regulators for excess market power. Some of these sectors are also favoured in the context of **ageing population**, a structural theme that we think will be another source of drift for relative asset returns. If deglobalisation materialises, as a reaction to inequality, China export could suffer, but its big domestic market should compensate. Among the other EMs, deglobalisation could hurt, but a shift from the production in China towards South East Asia, India, CEE countries and to a lower extent more developed and higher educated countries in North Africa, could still benefit these markets.

Finally, let us conclude with a **question mark on inflation**. Th fast closing of the US output gap and ongoing policy support will contribute, beyond the technical bounce of spring 2021, to push **US inflation** higher in the next few years. We forecast a moderate upward path (underlying trend around 2%), but the risk of a larger rise has increased given the Fed’s new and more complacent strategy (Average Inflation Targeting) as well as the structurally higher budget spending and deficits. As the labour market continues to heal, skilled workers availability could become scarce in selected sectors. Consumer firepower, following a surge in savings through the Covid crisis, may face production bottlenecks, caused by years of underinvestment.

We thus see risks for inflation tilted on the upside. Other policy-induced changes like reshoring of some parts of the supply chains and tighter labour market regulation (including upward minimum wage pressure and some re-unionisation) may also support inflation. In the **euro area**, **inflation** trend should normalise, too, albeit at slower pace and lower levels, near 1.5% on average in the next five years (1.7% at the end of the period). Inflation is partly a global phenomenon, and it is not clear how much propagation from the US we may see. Furthermore, concerns are growing that ballooning central bank balance sheets may herald a rebound in inflation, tacitly welcomed by highly indebted governments. As in the US, deglobalisation, rising bargaining power of workers and increased industrial concentration may favour structurally higher prices over the medium term. In this context, investors will **continue to look for hedges against higher inflation and yields**. Other than Value and Cyclical equity sectors and markets (EU, Japan, EMs), commodities, gold, inflation linkers and real assets (including private ones and real estate) will be in their radar screen.

c. ESG Criteria: The “S” Pillar gaining traction

The growing attention towards “Sustainability” and “ESG” should contribute to tackling inequality. A major acceleration happened with the publication, in 2015, of the UN sustainable goals, a set of 17 macro-objectives to be pursued by private and public organizations to re-shape the world into a more equal and sustainable place. Europe has been more active in the ESG space than the US, but Biden's electoral program suggests a powerful push towards ESG, which may allow the US to catch up, **which we think will create investment opportunities**.

While a number of analyses find that sectors linked to sustainability (ESG) offer a potential excess return over GDP[33], there is poor evidence of a link between performance and the Social dimension of ESG. The taxonomy and standards are not as developed in S than in E, making empirical analysis quite challenging in the Social dimension.

However, evidence[34] shows how social factors matter for risk assessment (Del Giudice, 2019): the study, which covers a sample of more than 1,000 companies from 18 countries over a period of 14 years, shows that high social standards can reduce a company systematic risk. The same study could not prove the same effect for the "E" and "G" factors. Companies with high social standards appear to offer more resilience to inflation shocks and recessions. This suggests that "S" could help investors build portfolios that respond in a less volatile way to market changes.

The social component of ESG, which focuses on firm-worker and firm-customer relations, **is much less mature than the Environmental one**, both in term of data disclosure and rebalancing of firm strategic initiatives and goals. Here are two examples:

- **Pay Inequality Ratio is the ratio between the CEO compensation and the average employee salary** – one of the most important income inequality metrics across sectors. In the EU, Financials (Consumer Staples) are on average more (less) equalitarian (see following Chart[35]). **There is scope for leveraging these data into innovative products targeting firm-level income inequality.**

[33] www.spglobal.com/marketintelligence/en/news-insight/latest-news-headlines/esg-funds-outperform-s-p-500

[34] https://deutschewealth.com/content/dam/deutschewealth/cio-perspectives/cio-special-assets/s-in-esg/CIO%20Special%20-%20The%20S%20in%20ESG.pdf

[35] As an example, in the financial sector, CEO compensation is on average 22.5 times higher than average employee wage. Higher inequality in the Consumer Staples, where the ratio goes up to 77.2.

Pay Inequality Ratio - Europe (ex UK)
Source: Bloomberg, GIAM Research

Sector	Min	Median	Average	Max
Financials	0.1	17.3	22.5	136.4
Communications	0.0	21.9	34.0	188.7
Utilities	0.4	26.3	32.8	121.8
Health Care	1.1	28.8	34.4	85.7
Energy	17.8	33.2	43.5	130.7
Industrials	4.4	36.7	65.4	743.6
Technology	8.4	46.2	63.1	379.3
Materials	7.2	48.0	50.4	115.6
Consumer Discretionary	4.9	51.7	72.9	450.7
Consumer Staples	1.3	60.6	77.2	234.8

- **Employees Training Expenditure**: On over 5.000 companies under our lens (global, listed), only 80 publish data on employees training costs. Leveraging on this metrics for new products is thus **challenging** for now.

However, over the next few years companies will be pressured to provide more and better data, while ESG rating providers will further fine tune existing ESG score methodologies (making them more transparent, too). In mid-May 2020 the SEC's Investor Advisory Committee's recommended that the SEC establishes broader ESG disclosure requirements. As disclosure is normalised, data will become more standardized and ratings more consistent. "Greenwashing" will not disappear instantly, but the backlash from doing it is likely to increase.

The Social dimension is catching up via the rebalancing of the firms' strategic initiatives and goals. The Covid-19 pandemic has boosted this process: investors are paying more attention to companies' emergency response mechanisms (e.g., smart-working) and employee benefits (e.g., telemedicine) as a gauge of long-term competitiveness (human capital) and operational integrity (business continuity)[36]. **Education** will remain a **key factor** within the Social dimension, as it impacts performance, social inclusion as well as the **equality of income and opportunities**.

6. Conclusion

Income and wealth inequality have **risen substantially** in **Advanced Economies** over the last 40 years**.** The tails of the distribution have increased, hollowing out the middle class.
We find the main reason in the development of the labour market. Technical progress, globalisation and weakening labour institutions have affected low and medium-skilled workers in AEs. Changes in the tax regimes also benefitted capital and wealth over labour income.
To reduce tensions, the expected profound changes in the labour market will need to be complemented by a **new "Social Contract".** It would promote labour market flexibility, but also maintain protection; seek universality in the provision of services; complement progressive taxation on labour incomes with taxation on capital; **and promote a wider responsibility of firms**.

A wave of populistic response followed the 2008-09 GFC: Trump's election, Brexit, the rise of 5S and Lega in Italy, Front National in France and AfD in Germany. Recently the public discontent seems to be channelled into more **mainstream policy response**, from the EU Recovery Fund to Biden victory; but the recent events in Capitol Hill highlight a high level of division.
AE governments are trying hard to offset the Covid-related shock on the economy through fiscal expansion and redistribution policies. Notwithstanding the more flexible approach to inflation targeting, the policy mix will not stay as expansive forever. **The relative timing and pace of fiscal and monetary tapering will be key for markets, and bonds in particular**. Ongoing fiscal profligacy associated with monetary tapering would inevitably push bond yields higher, and potentially disrupt cross-asset valuation. Instead, a faster fiscal consolidation associated to a durably accommodative monetary policy would keep bond yields low.
Over the next quarters, we expect both fiscal and monetary policies to remain very expansive on both sides of the Atlantic, which should continue to benefit markets. **Longer-term**, the exit strategy is less clear. A coordinated and cautious tapering of the policy mix is likely, with social and political pressure to address inequality likely to imply a moderate rise in **corporate and capital income taxes.** Moreover, regulatory pressure on companies could increase, while the State keeps a bigger role in the economy relative to the pre-Covid era. Structurally low GDP growth, increasing wage costs, anti-trust measures on Big Tech and diminishing international tax arbitrage will all be headwinds for margins and profit growth. **Expect returns on equity investments to be lower than in the last ten years.** In the meantime, as higher taxes fund increased social spending, public deficits may well stay elevated. Will monetary financing be required for longer, vindicating the Modern Monetary Theory? The twenties may see a combination of elevated fiscal deficits, monetary financing for longer, higher minimum wages, deglobalisation etc. There will be offsetting factors (automation, AI, ongoing digital competition), but **such policies may break, or reverse, secular disinflationary trends. It makes sense for investors to own inflation assets or build up inflation hedges.**
Finally, both the policy efforts and increased investors' sensitivity will force global companies to embrace ESG criteria at a faster speed, with the fast movers likely to be outperformers[37]. Since Biden's electoral program suggests a strong push towards sustainable growth, **the ESG themes in the US will provide new investment opportunities**.
The social component of ESG, which focuses on firm-workers, firm-customers and firm-supplier relations, **is much less mature than the Environmental one.** However, it is **catching up via a rebalancing of corporate strategic initiatives and goals, with the Covid-19 pandemic being a trend accelerator**.

[36] Reynolds F., COVID-19 accelerates ESG trends, global investors confirm, 2020, PRI
[37] John Baguios, ESG funds outstrip S&P 500; energy sector tackles environmental justice, 2020, S&P global

Imprint

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