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What Role for Europe in the New World Order? A Third Player Empowered by Green Productivity

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Abstract

Europe may emerge from the recent crisis stronger than before, as a player with a more sustainable democratic model than China and fewer political divides than the US. What reports tend to neglect is that Europe is currently the largest economic region, leading in exports, foreign direct investment, and most indicators on Sustainable Development. A reason for this downplaying is that Europe is seen as continent consisting of individual small and big countries and not as a political or economic whole. The paper takes an alternative position and carves out conditions for closing divides, to make existing European strengths more visible and extend the quality lead. The Recovery and Resilience Facility as well as the Multiannual Financial Framework must be used for reforms and coherence. A rebounding Europe requires a double strategy of fostering innovation while redirecting productivity towards energy and resource saving, away from its current priority on labour efficiency. This would empower Europe to be a quality player in a multipolar world in which there are no longer only two superpowers, China and the US, competing for attention.

Keywords

political and economic superpowers, new World Order, sustainable development goals, log-run prediction

1. Outline and Research Topic

The world is in its deepest economic crisis since the Great Depression of the twenties in the past century. The downturn will not last as long as it did after that crisis, and hopefully a full decade will not be required to return to the pre-crisis peak. This occurred in Europe after the Financial Crisis of 2008 and endangered the Euro project, leading to conflicts between a virtuous core and an unruly periphery.

The reason to hope for a shorter crisis in this case is that both fiscal and monetary policies have been providing credits and grants, boosting expenditures at an unprecedented speed and to a much greater extent. Banks have been much more stable since the reforms after the Great Recession. Europe is now starting to offer common bonds, which give highly indebted countries preferential access to cheap money via the Recovery and Resilience Facility (RRF) (Note 1). Of course, limiting the length of the crisis also depends on the effectiveness and acceptance of the vaccine in the first half of 2021.

This article reports the forecasts that China will overtake the US as the largest economy and that Japan and India will become the first followers for the next decades. Existing long-term forecasts only rank individual large European countries, without assuming that the size of the EU economy could be relevant for a new world order. In the next section, we take an alternative position, presenting data on GDP, manufacturing and trade for both the EU28 and geographical Europe, which show much higher outputs than for Japan and India. Looking at many indicators, Europe is larger today than the US and China.

The quantitative size of Europe translates into a persistent competitive strength if the integration process continues and political actions are better coordinated ("deepening of the Union"). We measure this quality position by comparing the European position with that of the US and China, based on the UN's Sustainable Development Goals as a broad spectrum and life expectancy as a comprehensive indicator on well-being.

The next section first addresses a constraint: that R&D expenditures in Europe are about one quarter lower relative to GDP than those of the US, and as a corollary of this the EU still lags the US as far as labour productivity is concerned. We argue that Europe should boost research, but also redirect productivity from its current focus on labour productivity towards resource and energy efficiency. This leads to a greener growth path. That is a core element of the European Green Deal and would extend the lead in sustainability. Another game changer would be if the Euro became a transaction and reserve currency outside Europe. This would also put an end to the neglect of Europe in international media and financial reports. And it could also limit nationalist sentiments in several European countries.

We sum up our findings about the quantitative position of today's Europe and how it can be maintained into the future. The quality lead, as documented by sustainability indicators, can profit from fostering but also refocusing productivity. Then the new world order will not be bipolar, dominated by China and the US. Europe will be a quality player, enjoying cooperation with stronger middle powers.

2. China and the US: Competing Superpowers in a Two-Pole World

Researchers and think tanks agree that the world will look different in a few decades (Note 2). China is forecast to leapfrog the US with a higher GNI, but it's also agreed that China and the US will be the two poles of the new world order in 2050. Middle powers are already trying to regain past glory or gain new influence in their neighbourhood. Africa will achieve high growth rates, if military conflicts and desertification can be limited.

Europe plays no role in these predictions; they refer only to Germany or the UK losing one rank after another over time, and being surpassed by India, Brazil, etc. This article argues that it is very likely that Europe will become a third superpower—assuming that integration continues, and populism-driven renationalization can be countered. Together with its buoyant neighbourhood, Europe can remain the largest power in quantitative terms (on par with China, with a far larger GDP than North America—understood as the US plus Canada and Mexico).

2.1 China Will Pass (Leapfrog) the US Soon

Since the breakdown of the Soviet Union, the US has been called the sole "remaining superpower". It intervenes politically and often through military force in conflicts outside its hemisphere. The US has furthermore shaped globalization, trade and investment contracts, and established a finance system with the Dollar as the main reserve currency all over the world, capturing or selecting top positions in international originations. Statistical data like GNI, share of manufacturing, the number of US firms in the top ranks of firms according to market capitalization confirm the US lead over the last centuries.

The rapid growth of China and its resilience in the Great Recession as well as in the COVID crisis have led to the assumption that China as "the Kingdom of the Middle" was on the road to reclaiming the number 1 position. Forecasts by international think tanks predict China to overtake the US in GDP in the next decade (where a recent publication of CEBR predicts this for 2028). The same source forecasts Japan to remain at the third rank for a while before being overtaken by India (Note 3). Germany will fall back to rank 5 or 6 as the largest European country and a loss of rank is predicted for all large European countries, but most of them are not within the top ten.

In this publication, as in most other international forecasts, there is no prediction for the EU, the Euro area or geographical Europe. While this may be justified, since the EU consists of independent states, this is not sufficient for assessing its role as an economic or political power. The "Brussels effect" is a term used to characterize the ability of the EU to set international standards, because of their quality. The EU furthermore has the sole legitimacy to negotiate trade and investment compacts for its members, and these are qualitatively different from pacts designed by the US or China. In military conflicts like the Ukraine conflict, the conflict about oil and gas around Cyprus or treaties designed to prevent Iran from building nuclear weapons, the EU is a soft power enabling compromise through negotiation (Note 4).

However, let us come back to the numbers. China already has a larger sector of manufacturing, even if it lacks raw materials and high-end products. It uses its export surpluses to invest in the Belt and Road Initiative, which is a network of highways, railway tracks, shipping routes and pipelines. All of these transport facilities predominantly serve Chinese interests, shipping products to markets or raw materials back to China (Note 5). "Made in China 2025", published in 2015, intends to shift China's image from a supplier of cheap goods to an exporter of medium-tech fabricated products. It lists ten key industries in which China seeks to make inroads and approach the top. In the longer and more visionary "China 2050 strategy", president Xi Jingping has set the ambitious goal for China to become the “first modern Socialist superpower”, leading in the political, cultural, ethical, social and ecological dimensions.

As far as ecological goals are concerned, China has successfully reduced urban smog and cut millions of deaths caused by bad air quality. It is developing technologies for small electrical cars. Climate neutrality is set as a goal for 2060, although this looks impossible, as China has not stopped building new coal plants.

After establishing the Asian Infrastructure Bank, China organized a Regional Comprehensive Economic Partnership (RCEP) in 2020. This is an Asian Pacific Free Trade Area consisting of 15 countries including Japan, Australia, and Singapore—but without India; and of course, without the US, which had earlier left the planned TTIP. RCEP is now the largest free trade zone in the world, but this partnership is by far not as deep as that of the European Union, since social or ecological standards are not included. No common currency is planned, nor will a High Court control adherence to the rules, and an “ever deeper integration” is not envisaged.

The US still leads in several important technologies; it enjoys the highest GDP per capita and labour productivity, but after the invention phase its firms “leave the country early”, so that the US suffers an import surplus even for high tech products. In other countries, firms remain at home at least for the early innovation stage, profiting from regional clusters and skilled employees. The last administration tried to get rid of the negative balance of payment, redrawing trade contracts and abolishing domestic standards for coal plants, oil refineries, and the horizontal drilling of gas or pipelines. This strategy failed, since raw materials and semi-fabricated products are sectors with low demand growth in a highly industrialized country.

2.2 Middle Powers Analysed; Europe Neglected

During the nineties of the last century, Japan was assessed by many analysts as on the road to becoming the technology leader, due to its lead in the car technology, just-in-time management, and catching up in labour productivity with the US. But it did not exploit all the profits from globalization, as it discriminated against imports, preventing their positive competition-increasing effects, and universities did not turn international, while immigration from its neighbourhood was also not allowed. Consequently, Japan suffered two lost decades, society became petrified, an old boys’ network dominated firms, societies and parliament (Aiginger, 2020).

European unification developed gradually, but even reforms effected by “muddling through” transformed a conflict-ridden continent into a region in which military conflicts no longer happen, and the EU helped eliminate conflicts during the accession stage and even in neighbouring not intending to join quickly. For this continuation of the peace-building narrative of its founding, the EU was awarded the Nobel prize for peace. The European unification process started with six members and the intention for free trade (and then for the four freedoms of movement of goods, capital, services, and people). It has a currency for 18 members, and more countries are fixing their currency to it. At least ten more countries want to enter the common market or at least qualify for closer cooperation, partly also outside of geographical Europe, so that it is a reasonable prediction that the EU will have more than thirty members by 2030.

Turkey was a leading player several centuries ago and seeks to regain a strong position in the region. Turkey applied for membership in the nineties, but membership was not welcomed by most European countries. Then Turkey changed to a presidential system with autocratic elements, and secularism is now mixed with Islamism. It increased its military spending, fought in Syria against the terror of the IS (with the help and betrayal of the Kurds) and sent troops into other countries. Conflicts over oil and gas resources are now amplifying the unsolved conflict in Cyprus (where the Greek part of the island is a member of the EU). The new resources are difficult to exploit (even if political questions were to be resolved) since the energy will only become available at a time when fossil energy should no longer be in use, assuming climate neutrality is to be reached in 2050. The currency loses value, which is countered by propaganda about external enemies and additional military expenditures (including purchase of weapons from Russia).

Iran is another regional power dreaming of regaining past glory. It in part aims for high technology, including attempts to enrich uranium and build nuclear weapons. Its ambitions are partly to gain local influence, partly to become a countervailing power to Israel, and partly to demonstrate that a country led by old mullahs can be a player in an age of globalization. Policy restrictions connected with adherence to limiting nuclear investment restrict economic well-being and catching up, while sustainable development goals are neglected.

India will surpass China as the country with the largest population, which is still growing, while that of China is declining due to its (former but recently stopped) one-child policy. The remarkable catching up does not translate into in societal progress, due to the high share of informal labour and the division of the population along religious lines. Potential conflicts with China and Pakistan require a strong and expensive military force. Per capita GDP is still far below that of industrialized countries and is less than in China. India was afraid to be swamped by cheap Chinese products and therefore did not sign the RCEP, which will limit the worldwide impact of the trade pact.

To summarize, all middle powers have some potential, including an increasing and young population, but spend more money on military build-up than modernizing the economies. External deficits and devaluation of the currency are necessary, while poverty and hybrid democratic systems persist. Common to all analysis is that Europe is neither mentioned as a superpower nor a middle power, large European countries are seen as individual entities, with a smaller GDP and political influence than that of Japan or India.

3. Revisiting the Size of Europe Today

3.1 Alternative Assessments by Quantitative Indicators

Estimating the economic and political size of Europe requires two decisions:

First, *how to define the scope of "Europe"*, where membership of the EU or geographical Europe are two choices, but additionally also wider Europe—a concept including neighbours in which the influence of Europe via trade or investment relations and technological cooperation is equal to or larger than that of China or the US. Second, *which indicator for size* we choose; we can take the GDP, population, trade (including surplus or deficit), technology or alternatively qualitative outcomes (like Sustainable Development Goals or a single comprehensive indicator such as life expectancy).

Table 1. Shares in World Output

	GDP (current US$)		GDP (constant 2010 US$)	
	2000	2018	2000	2018
	Percentage shares			
Geographical Europe [1])	24.7	23.1	30.4	25.1
EU28	21.6	18.5	25.4	19.8
China	3.6	15.8	4.5	13.1
US	30.5	23.9	25.3	21.6
World	100.0	100.0	100.0	100.0

Source: World Bank, World Development Indicators. [1]) EU28, EFTA, Turkey, Western Balkans and CIS-Europe.

For the first point we start with geographical Europe, the concept in the middle of two extremes, the narrow term of the EU28 and the widest of Europe plus neighbours. And for indicators we start with real GDP (Note 6), geographical Europe, defined as the EU plus European non-members, Turkey, and European successors of the Soviet Union—CIS Europe), produced 25% of world GDP in constant US Dollars, this is larger than the share of the US which is 21.6% and twice as high as that of China. The share of the EU28 is 19.8 % alone, and if we added Switzerland and Norway it would be as high as the share of the US.

Measured by industrial output, the lead of geographical Europe over the US is larger, namely 23.2% vs 16.0%, even the EU28 alone is larger (18.5%). Here, China is already number 1, due to high output and cheap products. Today, Europe is a quality leader, and China is leapfrogging in quantitative output.

Table 2. European Shares in World Exports and Manufacturing

	World exports (current US$)		Manufacturing, value added (current US$)		Manufacturing, value added (constant 2010 US$)	
	2000	2019	2000	2018	2000	2018
	Percentage shares					
Geographical Europe [1])	22.5 [2])	23.4 [2])	28.6 [3]).	21.0	25.8 [3]).	23.2
EU28	16.3 [2])	15.6 [2])	20.6	17.2	22.1	18.5
China	3.8	13.3	7.1	28.2	4.3	27.6
US	11.9	8.8	25.2	17.0	18.0	16.0
World	100.0 [2])	100.0 [2])	100.0	100.0	100.0	100.0

Source: World Bank, World Development Indicators. [1]) EU28, EFTA, Turkey, Western Balkans and CIS-Europe.

[2]) Without intra-EU28 exports. [3]) 2005.

Europe is the trade champion, leads in foreign direct investment and development assistance. Geographical Europe (excluding intra-EU exports) supplies 23.4% of *world exports*, dwarfing the US and China (with 8.8% and 13.3% respectively). The share of China is even lower than the exports of the EU28 alone. China has a large trade surplus, Europe a smaller but still positive for goods as well as services. The US has a large external deficit, which could not be reduced by lowering environmental standards or redrawing trade contracts by the Trump administration. Geographical Europe has the highest *foreign direct investment* share, it is just under 50% of outward as well as inward flows (the EU28 alone invests 40%). China's new strategy has more than doubled outward flows, which now amount to 12.8%, the US has a deficit in some years, and on average 20% for outward as well as inward flows.

Europe also spends the largest amount of money on development assistance (ODA Definition). What is even less known is the military expenditures of China or Russia. European expenditures are, however, extremely inefficient, since most are spent on intra-European conflicts, even if there are no severe conflicts within the borders of the EU. Steering the inward migration of distributing humanitarian refugees according to quota or demand is not successful.

Table 3. Foreign Direct Investment: Stocks and Flows

	FDI outward flow (current US$)		FDI outward stock (current US$)	
	2010	2018	2010	2018
	Percentage shares			
Geographical Europe [1])	44.5	44.9	49.8	43.0
EU28	33.6	38.5	41.9	37.1
China	5.0	12.8	1.6	6.3
US	20.2	-6.3	23.7	20.9
World	100.0	100.0	100.0	100.0

Source: World Bank, World Development Indicators. [1]) EU28, EFTA, Turkey, Western Balkans and CIS-Europe.

The lowest share for Europe is given for population. It is currently 7% of world population for the EU28 and about 10% for geographical Europe. That is double as much as the share of the US and about one half of China. Europe is an ageing society which needs inward migration, but its population is reluctant to accept this, even in depopulating regions. This resembles the opposition of Japan to immigration and requires a policy response that addresses heterogeneity as an opportunity, as is done in the business sector. The US has been very open in the past; half of its citizens and a higher share of the children are non-whites in many states, which for a long time was not seen as a problem, neither in left-leaning California nor in right-leaning Texas, but is now declared as a danger (see the proposal of a border wall by the Trump administration, which Mexico should pay for).

3.2 Quality Positions Revealed by SDGs and Life Expectancy

If we change from quantitative indicators to quality, we can either take the broad approach of sustainable development goals, offering seventeen categories for evaluation, or alternatively look for one single comprehensive indicator such as life expectancy at birth.

Again, most statistics report on countries and do not report figures for Europe. To get a first assessment, we take unweighted averages over EU countries. This shows that Europe has less absolute poverty or hunger than the US. Both are larger in China and all middle powers, this result extends to relative measures of poverty, and most indicators on inequality (Aiginger & Kreuz, 2020).

As far as ecological sustainability is concerned, areas with *organic farming* are about 6% in the EU28, and 0.5% in the US and China, *CO2 Emissions* relative to GDP from fuel combustion in the EU28 is one third lower than in the US and two thirds lower than in China, while a similar picture is revealed by primary energy relative to GDP. In the global SDG dashboard, China is ranked 54 among 166 countries with an index of 70, and the US ranks 35th (Note 7). All EU members are among the top 50 countries, Europe takes 14 of the top 15 ranks, only four EU members are behind the US.

Life expectancy at birth is 76 years in China, it is 78.5 years in the US (and falling due to opioids and obesity), but 81 years and increasing in Europe (in the EU as well as geographical Europe).

To summarize, the lead of Europe in the qualitative indicators is impressive. Though the SDGs should give a picture for all UN members, it may not signal performance among the richest countries, an aspect which we address in the next section on research expenditures and productivity.

One shortcoming is revealed by the SDG goal of quality education and is the R&D deficit, both of which are essential for the dynamics of an economy (Note 8). In contrast to the importance of innovation for reaching the frontier, the expenditures on research and development in Europe are still only somewhat higher than 2%, while they amount to 3% in the US. China´s expenditures are also slightly above 2%, and it targets a ratio of 3% for 2025. Europe had succeeded in closing the gap in labour productivity to the US since WW2, but this catching up stopped in the nineties. We will now take up the imperative for Europe to foster research so as to reach the frontier but given the importance of climate change and sustainable development show that a quality leader should also redirect research and productivity towards energy and resource saving.

4. Fostering and Redirecting Productivity

4.1 Research Deficit and Failure to Reach the Productivity Frontier

Modern growth theory stresses that the dynamics and competitiveness of rich countries depends on research expenditures and their quality signalled by productivity. Here, Europe—however its regional scope is defined—has a deficit. The expenditures on research and development in Europe are only a little higher than 2%, while they amount to 3% in the US. China´s expenditures already passed those of the EU in 2012 and it targets a ratio of 3% up to the end of the decade. A corollary of the low expenditures in Europe is that it first succeeded after WW-2 in narrowing the gap in labour productivity towards the US, but this catching up stopped in the nineties (Ketels, Porter, 2020)

Consequently, international organizations (like the OECD, IMF, and World Bank) stress that Europe should boost productivity growth, taking for granted that this term is well-defined. Implicitly, they define it as higher output per worker or per hour. In each of these measures, Europe has not up to now been able to reach the productivity frontier, as defined by US performance. We will now take up the advice for Europe to foster research so as to reach the frontier. However, given the importance of climate change, a quality leader should also redirect research and productivity towards energy and resources, and this will be analysed in the next section.

4.2 The Dual Character of "Productivity"

Productivity increases can result from higher labour productivity, or by increasing energy and resource productivity (Note 9). These two partial productivities, which I call "grey" versus "green" productivity, have very different policy implications.

Booming labour productivity exacerbates the growth imperative; if labour productivity grows by 3%, output must increase at the same rate. Otherwise, unemployment will ceteris paribus increase and, above all low-skilled workers will lose their jobs (Note 10).

The alternative increase of energy and resource productivity also reduces inputs and stimulates output and cost competitiveness, but at the same time it reduces emissions and reflects emissions from long-distance transport.

Achieving the climate goals requires a reduction of greenhouse gases of 80 to 95% (depending on the speed of output growth). Radical decarbonization is only socially acceptable if low-and-middle-income wages increase and employment is stable. This is possible if the green type of productivity increases much faster than the grey one.

“Redirecting productivity” from labour productivity to energy and resources does not represent an unjustified interference with the market economy. The current focus on labour productivity itself follows from high taxes on labour along with untaxed energy and transport inputs; it does not fall “like Manna” from heaven. Substantial tax reforms, including standardised tax bases and eventually also minimum taxes for emissions and public bads, would limit tax evasion, and base shifting would support green productivity as well as limit expenditures for repairing the consequences of climate change.

Neglect of redirecting need in the Annual Growth Strategy 2021

The European Commission calls for the submission of proposals for the Recovery and Resilience Fund by the end of April 2022 at the latest. These should strengthen economic and social resilience and should follow the goals of the “Annual Sustainable Growth Strategy (ASGS)”. Unfortunately, EU forecasts as well as communications—written by some of the best experts in the European Commission—do not discuss the warranted direction of productivity. The importance of “productivity” is stressed in the ASGS many times, but it is only defined in a few paragraphs, and in these cases it is always defined as labour productivity. Nowhere is there a requirement to report or measure energy productivity or resource productivity, or to determine whether this welfare-enhancing type increases to a greater extent than double-edged labour productivity.

Guidelines and indicators published by the European Commission, as well as by research institutes and think tanks, have an impact on economic policy. As the Stiglitz Commission has correctly stated, “What we measure affects what we do… if our measurements are flawed decisions may be distorted” (Stiglitz et al., 2009).

Therefore, short-, medium-, and long-term forecasts should publish and monitor partial productivities. And the Annual Growth Strategy as well as the proposals for the RRF should be evaluated based on their effects on climate change, inequality and unemployment. Calling for higher productivity without defining its main component is the wrong advice. The regular publication of figures on energy and resource productivity in all reports is a minimal requirement for this. Redirecting technical progress has is to be monitored in the European Semester.

4.3 Other Game Changers Supporting Europe's Position

Europe's size and performance is not mentioned in the international media, since they tend to report on individual European countries. But it also not perceived by European citizens, as National leaders tend not to report on successful European strategy decisions, but rather on what they achieved for the own country after a meeting in Brussels. Neither the European Commission nor the European Council highlight the advantages of the EU in becoming a global player. They do not laud the size of investments in Africa, which are higher than those of China or the US. The advantages of the European socio-political system become visible only indirectly when economic problems in other parts of the world become evident, such as dictatorships, attempts to increase territory, racial discrimination, bush fires and the handling of the health crisis in the US, China, Russia, Iran or Brazil. By proclaiming the new European Commission "geo-political", the EU Commission president, Ursula Von der Leyen (2019) intends to give global problems a greater priority.

We venture a few projects which could support the strength and visibility of Europe

Europe must more often **speak with one voice**. This is not easy, since the EU is still a community of independent states, with a limited number of fields in which the EU alone can set laws and directives, and in the others there are either shared decisions or national ones. But the majority of young Europeans consider themselves to be European or citizens of both their countries and Europe (De Vries & Hoffmann, 2018). Coordinating voting in international organizations would limit egotistical national interests like rebates in contributions to the EU-budget. A European seat in international organizations from the UN to the WTO or the World Bank would force Europe to coordinate its strategy ex ante and discourage egotistical sidesteps.

Europe has to reduce **internal inequality** between persons and again across regions, as well as between the centres and the periphery (Aiginger & Kreuz, 2020). This would limit nationalism and populism, parts of which are motivated by the feeling of regions being "forgotten". Microeconomic competitiveness, defined as regional bottom-up plans to enhance employment and welfare are stressed by Ketels and Porter 2020. A strategy against the ageing of population, steering migrants to regions with declining populations would prevent existing infrastructure from decaying and help Europe benefit more from migration.

Europe should try to extend the use of the Euro, as well as reduce the use of the Dollar as a reserve currency before this is achieved by the renminbi. Increasing the share of transactions in Euros would reduce costs. Creating a **Euro debt market** with high liquidity would provide for international investors looking for alternatives to the Dollar, a process started with the ESM. Currently only 23% of international loans are in Euros (compared to 62% and 55% in dollars); foreign exchange turnover in Euros is 16%, foreign exchange reserves 20% (Baldwin & Weder di Mauro, 2020). As a global payment currency, the Euro has made substantial inroads, but the share of 40% is still 5 percentage points less than the share of the Dollar, though Europe´s trade share is nearly twice as high as that of the US (European Commission 2018, see also European Central Bank 2020) (Note 11).

Europe would increase its leverage if a **European quality newspaper** and weekly magazine existed. The Financial Times as well as The Economist offer excellent reports, but do not support a common European view, as a player in the upcoming new world order. Data on European shares in trade or GDP—instead of in country shares—are seldom reported. Country differences and internal problems are highlighted, not European solutions. Reporting expenditures in Dollars instead of Euros is maintained, even if European firms and agencies are involved. A European communications agency or TV channel would also be important.

Europe has to build **strong partnerships** with non-European neighbours in the East and the South (Aiginger, 2018; Aiginger & Handler, 2018). Even if we argue that the share of Europe in GNI, exports and manufacturing is larger than perceived, it will shrink for a given geographical size, due to lower economic growth than emerging economies and decreasing populations (both typical for top income regions). Europe can offer partnerships to its neighbours since it is a continent with soft power, not intervening by military force. Europe's lead in fighting climate change offers technologies important for Africa, which "Rising Africa" can adapt to local needs, droughts, and a lack of long-distance net energy. For digital payment and emergency health systems, advice from distant doctors has already been successfully implemented.

5. Summarizing and Looking Ahead

The size of a region can be assessed according to different criteria. Forecasts by think tanks and international institutions concur that China will successfully catch up with top countries and pass the US in the size of GDP within the next decade. In most policy reports and forecasts, Europe is not seen as a unit, neither the EU nor geographical Europe. They report on individual large countries, despite Europe´s success of deeper economic and political integration, leading to the four freedoms of trade, services, persons and capital. The EU now has a common currency for the majority of EU member countries, with many non-members pegging to it. The banking system has been stabilized after the Financial Crisis.

5.1 Quantitative Size Today and Trends

A still larger role for Europe will be feasible, if (i) the EU further integrates internally, (ii) it defies requests for renationalisation of policy by populists, if (iii) it extends memberships to West Balkan and establishes partnerships with neighbours geographically outside Europe, but much nearer to Europe than to Washington or Beijing.

The GDP of EU28 today amounts about 24% of world GDP, this share would halve for the given members and moderate growth up to 2050. Together with direct neighbours it shrinks by only one third. Adding the European successor states of the former Soviet Union and Northern Africa, the share of Wider Europe remains at approximately 30 % of the world GDP. This would imply that the quantitative share of "Wider Europe" in world GDP would be on par with China and twice as large as that of North America.

Measured by its share of world exports and imports, the EU28 is currently by far the largest trade bloc; it is specialized in quality products and enjoys a trade surplus. It will remain an export champion for a long time, far ahead of China and the US. This lead can be further extended, if we look at geographical Europe or wider Europe.

5.2 Quality Indicators Tell a Clear Story

The performance of Europe is even more impressive if we use indicators on sustainability, as offered by the Sustainable Development Goals. Europe is clearly on top in energy efficiency, containing greenhouse gases, boosting organic farming, and eradicating absolute poverty and hunger.

A shortcoming is that Europe today does not invest enough in Research and Development (R&D) and consequently has failed to close the remaining gap in labour productivity relative to the leading US. Think tanks and international organisations therefore recommend that Europe increase "productivity". While this article agrees that boosting productivity is important, it stresses that the type of productivity is equally important if welfare should be measured not only by GDP. Redirecting productivity from its current dominance of labour productivity to resource and energy productivity would reduce the growth imperative. Since high economic growth is no longer the overarching goal for rich countries and ceteris paribus leads to higher emissions incompatible with limiting climate change, it is no absolute goal. Boosting energy efficiency and lowering the emphasis on labour productivity would be a double-win strategy. Quality of life would increase with new technologies, and GDP would be generated by the greening of productivity.

5.3 World Will not Be Bipolar

We conclude that today Europe leads in many quantitative indicators, but even more so when we assess product quality, sustainability, and life chances. These facts are not highlighted by international institutions, think tanks and the media, since Europe is still assessed as a region with mainly independent states. These often cling to suboptimal national decisions, only gradually arriving at common solutions in a process of "muddling through". On the positive side, the ambitions of the European Green Deal and the creation of a Geopolitical Commission can accelerate change. At the same time, the challenges of the COVID crisis, the ongoing autocratic tendencies in China and the political divides in the US could effectively encourage Europe to become more ambitious and self-confident. It could take more responsibility for climate concerns, limiting large income differences and cooperating with its buoyant neighbourhood. The result could be a multi-polar world, with Europe as a quality player offering its model to and learning from its neighbours.

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Notes

Note 1. European Commission (2020).

Note 2. Long-run forecasts are available from the OECD, the World Bank, the IMF and many consultants, and we refer to the recently published prediction of CEBR 2020, which anticipates a rather early return of China, not least through its ability to restart growth after the COVID crisis.

Note 3. Aiginger (2020).

Note 4. Rodrik (2020).

Note 5. China uses its trade surpluses for worldwide investment, but often by applying strings like taking control of ports in Sri Lanka (after the local government was unable to pay back a credit not reported to IMF) or in the Greek port of Piraeus or in logistics centres from the Western Balkans to Spain (which are welcomed by the host countries in the short run, but will be incompatible with goals to decarbonize shipping and ports).

Note 6. Here again we have choices between nominal and real figures, in purchasing power units or exchange value.

Note 7. The US reach an index of 73.

Note 8. The theory of economic growth (whether it be modern growth theory or neoclassical theory in the Solow Swan tradition) stresses the importance of innovation for growth and modern researchers stress the role of research and top universities for frontier countries (Aiginger 2016, Aiginger and Rodrik 2020).

Note 9. For the sake of simplicity, we put aside capital productivity (both human and physical capital).

Note 10. Reducing working time would be an alternative and is gradually happening in industrialized countries through a reduction of overtime or a shift to part time work. However, it is not easy to boost shorter working time as a top-down strategy, as shown by France, where it resulted in trade deficits and lower growth. Shorter working time has to be accompanied with lower wages per hour, which is not in the interest of most low paid employees, And the more the skilled group succeeds in maintaining their working time, inequality tends to increase during such an endeavor. A corollary of a successful green transformation is that wage increases should no longer use labour productivity as a yardstick. If green productivity dominates, "productivity-oriented wage policy" will reduce the workers' wage share.

Note 11. Dethronizing the Dollar as a reserve currency, enabling Euro-members to increase debt without rising interest rates, could be a European goal. Pressing European banks to cover the losses of US firms after the Financial Crisis (despite the bulk of the problems originating in the US) by threatening to end their licenses in the US should no longer be option. Forcing Europe to stop trade with countries which the US wants to sanction would be limited if the US can no longer monitor all transactions using the Swift system.