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The Roaring Twenties after Covid-19: revisiting the evidence for Europe

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Abstract

Inspired by conspicuous historical parallels, some scholars and journalists have recently postulated that GDP growth and productivity might boom in the aftermath of the Covid-19 pandemic. This paper reviews the evidence for and against the 'Roaring 20s' hypothesis, concluding that some countries might experience a forceful economic expansion, possibly fuelled by pent-up demand, compounding a successful digital and green transition, or leveraging an export-led model. However, a strong prolonged economic bonanza is unlikely to materialise evenly across the EU. An uneven recovery would acquiesce imbalances within the Union, and especially the euro area. As such, policymakers should avoid complacency, and make the most of the Recovery and Resilience Facility funds, combining them with wide-reaching structural reforms, to improve economic prospects for the decade to come.

Keywords

economic growth, growth acceleration, roaring twenties, technological revolution, boom bust cycle

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"*History doesn't repeat itself, but it often rhymes*"
Mark Twain

1. Introduction

The 'Roaring Twenties' was a decade (approximately 1921-29) of growing prosperity in the Western world, fostered by deferred spending, a boom in construction, and the rapid expansion of consumer goods, such as automobiles and electric home appliances. These factors materialised on the back of World War I devastation and, crucially, the N1H1 'Spanish Flu' pandemic. As such, several pundits, journalists, commentators, and academics have been drawing parallels with that historical period, suggesting the post-Corona recovery could be characterised by an economic boom, as illustrated on a recent cover story of the British magazine *The Economist*[i]. This paper reviews the evidence in favour and against a reiteration of the 'roaring 20s' in the 2020s, in order to draw policy lessons from the past, especially given that boom episode ended with the 1929 Wall Street crash, the Great Depression, setting the scene for the rise of Nazism, Fascism, and World War II.

There are indeed a host of parallels between current global conditions and those in the run up to the 'roaring 20s', albeit perhaps due to different underlying reasons. Analogies include the end of a pandemic (N1H1 then, Covid-19 now), the proliferation of new technologies (electricity then, AI/digital now), a transport revolution (combustion engine then, electric vehicles now), political polarisation (rise of Communism and nationalism then, anti-establishment now), emerging international rivalries, de-globalisation, and a soaring stock market.

Figure 1 shows real GDP per capita across selected Western countries. Two things should be noted. First, irrespective of a common trend across Western countries, it is evident that the 'roaring 20s' materialised to different extents in various nations. For all, the challenge was to transition out of a centralised wartime economy, and back to a peacetime economic structure.

The process was hardly smooth, and in some cases led to moments of economic crisis, such as in Italy in 1921, when two large industrial trusts, Ansaldo and Ilva, collapsed after having outgrown during the war. As a result, the trend of a 'roaring 20s' is particularly visible in France and the Netherlands, after the devastation of WWI, but less so in Italy, which experienced a recession, a balance of payment crisis, the rise of Fascism, and, eventually, autarky. In Germany, the decade was conspicuously characterised by hyperinflation, mainly due to money printing to finance WWI and subsequent war reparations. In the United States, where the 'roaring 20s' are most visible, GDP per capita went up from roughly $10,000 to almost $12,000 just before the 1929 stock market crash. Nonetheless, even there, the transition from a wartime to a peacetime economy was all but seamless. Lack of jobs for returning veterans led to strikes, social tension, and a rise in Communist sentiments, which were suppressed by the federal government[ii]. This is a period known as the Red Scare (1919-1920). Eventually, the domestic rise of consumer credit fuelled consumerism, including for mass-produced cars like Ford's Model T. In parallel, the spread of electricity paved the way for a variety of home appliances, including the washing machine, opening up space for a reduction of working time and an expansion of leisure, propelling the recovery.

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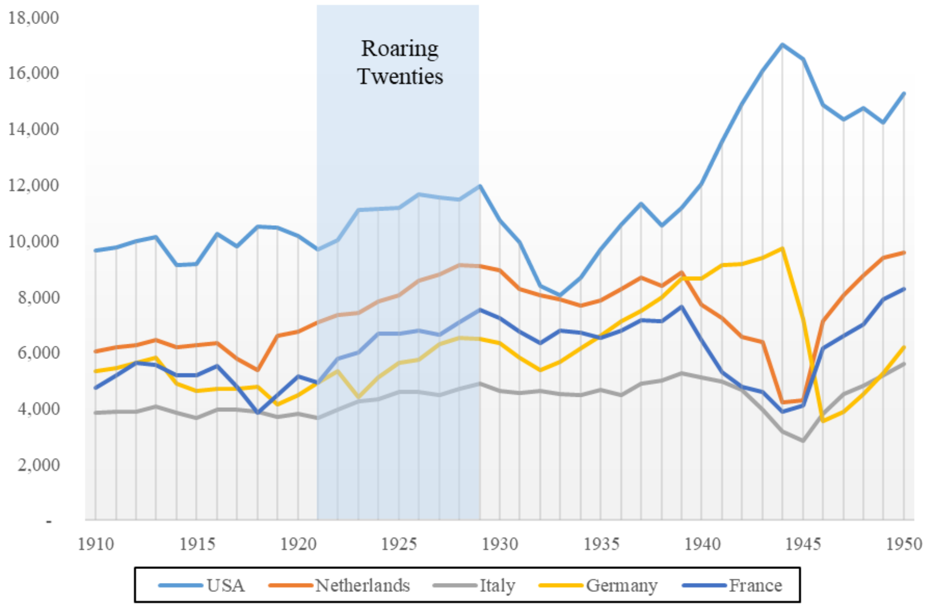
Figure 1. Real GDP per capita for selected Western countries, 2011 constant US dollars



Source: Author based on Maddison historical data.

The second element to take away from Figure 1 is that, evidently, the 'roaring 20s' do not compare in magnitude to the post-WWII reconstruction boom in Europe. The first use of the term 'roaring twenties' dates back to August 15, 1923, and was not used to define the social and economic boom at large, but rather the development of the movie industry, specifically for women. Intriguingly, it was first used in the newspaper *Lincoln Journal Star* (Lincoln, Nebraska) to note that:

> "*During the war and after the war up to the big movie slump of 1920, Hollywood and Los Angeles were literally swamped with would-be movie queens. New companies were springing up like mushrooms […]. But the "roaring twenties" have gone, and the movies are now on a different and very much more efficient basis. Casting directors and welfare workers are unanimous in declaring that, with the greatest talent and the best of looks and the rarest of luck, no unknown girl nowadays can hope to make even a small reputation in Hollywood inside of two years*".

This nostalgic use of the term suggests that the current bonanza we associate with the 'roaring 20s' was far from clear in the first years of the 1920s, even to those living through them.

Perhaps what made them particularly 'roaring', at least in terms of perception of progress at the time, was a comparison to a rather sluggish growth decade beforehand: something that holds true across countries. In 1921, U.S. real income per capita was roughly at its 1906 level. This constitutes yet another parallel to our days, as Western countries in the aftermath of the Great Financial Crisis have been characterised by so-called 'secular stagnation' (Rachel and Summers, 2019).

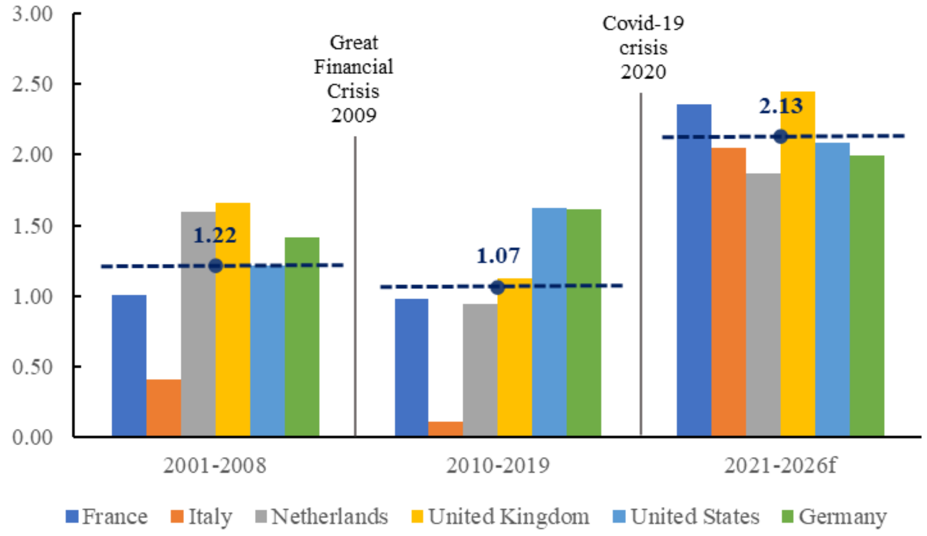
In what follows, I briefly list a set of arguments for and against the optimistic forecast of a high-growth decade for Europe following the end of the Covid-19 pandemic. In both cases, I will look first at the prospective for a cyclical short-term boost, and then the possibility that this feeds into a longer-term growth momentum.

2. The Roaring enthusiasts

A variety of arguments have been used to push the view that we could experience a re-edition of the 'roaring 20s', often reaching beyond standard macroeconomics, to include social psychology or even management studies.

First, looking at the short term, some pin down their hopes to the fact that the recovery from non-financial crises is generally faster than from financial crises such as the 2008/09 recession[iii] (Reinhart and Rogoff, 2015). Indeed, early evidence from countries where the pandemic was brought under control, such as Australia, shows an extremely rapid recovery in growth and jobs. This is because non-financial crises generally produce less debt overhang, except in the private sector. While this could potentially curtail investment and weigh on long-term growth, the low interest rate environment makes debt burden more tolerable, not only for the public sector, but also for private companies. All this is particularly evident in Figure 2, displaying the recovery from the 2009 Great Financial Crisis, and the latest IMF forecasts up to 2026. Finally, for Europe, the Next Generation EU programme is expected to support investment and, somewhat serendipitously, might end up being perfectly timed to kick in when the cyclical recovery will start to gather steam, and the vaccine campaign reaches a critical mass[1].

Figure 2. Real GDP per capita growth for selected Western countries



Note: Data referring to the period 2021-2026, marked (f), is based on the forecasts contained in the April update of the IMF WEO. Source: Author based on IMF WEO.

Second, and related to the point above, roaring optimists note that the European response has been swift and decisive. One year into the crisis, the economy has proved resilient and adaptable to operating in a pandemic environment, while manufacturing exports are supported by a strong nascent recovery in Asia, where Covid-19 is more under control. Although bankruptcies might increase once extraordinary support measures are lifted, these should be contained by a cyclical upswing once restrictions are removed (so-called 'mini-corona boom'). In this respect, the 2020 summer, when economic activity effectively returned to pre-pandemic levels, and a sharp GDP expansion ensued, lends scope for optimism. Evidently, the cyclical boom could be supported by excess savings and pent-up demand, on the back of the strong

[1] This point of view stresses the structural, rather than cyclical, nature of the Recovery and Resilience Facility.

income support measures rolled out by EU governments. By some estimates, these excess savings could constitute a stimulus worth 3 to 6 percent of GDP across Europe[iv].

Further underpinning the prospects for a short-term boost, social scientists have pointed out to psychological factors dominating in the aftermath of a shock like a pandemic. In his most recent book *Apollo's Arrow*, Yale physician and sociologist Nikolas Christakis argues that the aftermath of pandemics is typically characterised by a positive psychological uplifting, spurring social interactions, creativity, experimentation, risk taking, and flourishing arts. This observation extends very far back. As reported by Christakis (2021, p. 283), Agnolo di Tura, a shoemaker and tax collector from Siena (Italy) who chronicled the Black Death noted:

"*And then, when the pestilence abated, all who survived gave themselves over to pleasures: monks, priests, nuns, and lay men and women all enjoyed themselves, and none worried about spending and gambling. And everyone thought himself rich because he had escaped and regained the world, and no one knew how to allow himself to do nothing.*"

Indeed, the 1920s was a time of liberation, in which women won the right to vote in several countries, from Germany to the UK and the U.S., and starting to wear short skirts, drive cars, smoke cigarettes, and drink in public. In America, at the same time, Black poets, authors, and jazz musicians found wide audiences, as part of what is commonly known as the 'Harlem Renaissance'. As such, Christakis argues, we might observe similar patterns following Covid-19, as people rush to re-connect[v].

On the back of all this, optimists see reasons to expect that, at the very least, Europe will rapidly return to its pre-crisis potential output, following a short-term cyclical boost once vaccines allow for a re-opening of the economy.

From a more structural long-term standpoint, the conversation on the 'roaring 20s' is linked to the long-standing debate between techno-enthusiasts, such as Erik Brynjolfsson of MIT, and techno-sceptics, such as Robert Gordon of Northwestern University. Bob Gordon's view, expressed in *The Rise and Fall of American Growth*, is that productivity growth is over, because the latest innovation, including AI and Big Data, cannot match the great innovations of the past. These include those that characterised the 1920s, such as electrification and the internal combustion engine. More recently, when reflecting on the 'roaring 20s' hypothesis, Gordon remarked that "while it is likely that productivity growth will revive somewhat in the 2020s from the dismal record of the 2010s, there is no chance of sustained decade-long growth that matches the achievement of the 1920s." On the other hand, Brynjolfsson has long argued that the digitalisation revolution has been long brewing, and it is just a matter of time to see its GDP and productivity boosting effects (Brynjolfsson and Hitt, 2000). This view is gaining policy attention, and was recently embraced also by former Bank of England chief economist Andy Haldane[vi].

The Covid-19 pandemic, which severely reduced inter-personal contacts, forcing firms to digitalise, could have served as an accelerator of innovation and technological diffusion[vii]. Indeed, the World Economic Forum this year found that more than 80% of employers intend to accelerate plans to digitise their processes and provide more opportunities for remote work, while 50% plan to accelerate automation of production tasks. A global survey of executives by McKinsey & Co. revealed that many corporations were a "shocking" seven years ahead of where they planned to be in terms of digitalisation. Finally, firms that made digital investments at the height of the crisis are likely to want to reap the benefits also once the epidemic is over. This could imply protracted hefty savings in terms of office space and business travel for companies, and of commuting time for workers, leading to a structural boost in productivity statistics. Recently, even techno-pessimist Robert Gordon had to concur that Covid-induced digitalisation will most probably lead to a surge in productivity during the early 2020s[viii].

3. The Roaring pessimists

Unsurprisingly, many representatives of the 'dismal science' have a variety of reasons to be more pessimistic about the future.

First, notwithstanding the strong crisis response at national and EU level, some damage in the economy will probably be unavoidable. Virus containment measures are likely to have affected individuals and workers through a variety of channels. In particular, there is ample evidence to suggest that young people who enter the job market during a recession face lower wages, which linger on for over a decade (Oreopoulos *et al*, 2012). Relatedly, albeit on a longer time horizon, distance learning might have affected the overall quality of human capital formation, and particularly so for students coming from disadvantaged backgrounds. A similar effect could materialise for workers who probably experienced some skill losses while idle during lockdowns. According to research by the World Bank, countries struck by pandemic outbreaks (before Covid-19) experienced a marked decline in labour productivity of 8% after three years relative to unaffected countries (World Bank, 2020). Along similar lines, IMF research based on 133 countries between 2001 and 2018, shows how pandemics tend to reduce output and increase inequality, stoking social unrest, which further lowers output and worsens inequality (Sedik and Xu, 2020). In line with this pattern, the 'roaring 20s' in the U.S. were characterised by staggering inequality, as best exemplified by F. Scott Fitzgerald's 1926 novel *The Great Gatsby*, slowly setting the scene for the Great Depression. For this reason, Venezuelan economist Carlota Perez, an expert in historical boom and bust cycles, has seen the 'roaring 20s' as a continuation of the Gilded Age, a period so-defined by Mark Twain, and characterised by prosperity but also staggering inequality in post-Civil-war America (Perez, 2019; Perez, 2002).

In addition, as noted by Barry Eichengreen, it might very well be that the pandemic shock will lead to a structural increase in savings rates, as people become more cautious after having experienced unexpected hardship with Covid-19 (Eichengreen, 2021). If this were the case, 'excess savings' would be here to stay, diminishing the power of the pent-up demand optimistic argument, and further compounding the savings glut behind Larry Summer's 'secular stagnation' hypothesis for advanced economies (see also Jordá *et al*, 2020).

Second, the fact that a wave of bankruptcies has not materialised yet is simply due to the fact that state aid, together with debt moratoria and some degree of financial repression, have been rolled out forcefully based on the presumption that the Covid-19 recession was fundamentally a liquidity crisis with transient impacts. Most, if not all, firms have been propped up. However, once the pandemic dust settles, some sectors might have disappeared or declined permanently, with classic examples being structural transformations of retail, which moved to e-commerce, or business travel: both unlikely to return to previous glories following the pandemic. This structural transformation needs to be read within the context of wider changes in the economic system, not least the policy acceleration towards low-carbon technology as part of the European Green Deal. This further compounds the challenge related to innovating business practices. Economic policies that were appropriate in the early phase of Covid-19 could impede this structural transformation, supporting irremediably stagnant sectors, generating so-called 'zombification'. Based on this risk, due to a lower resilience or capacity for swift transformation, the IMF in its latest WEO update expects the EU and Eurozone to return to pre-crisis levels of GDP much later than other advanced economies, such as the U.S. and Japan.

Third, there has been a political consensus on using fiscal policy to support the economy so far. However, the fiscal tool could be constrained going forward, depending on a variety of factors, such as the future evolution of inflation, and the ECB's reaction to it, the retention of trust on financial markets, and the future evolution of EU fiscal rules. Fiscal policy could either become a drag on growth, as it did in in the Eurozone following the Great Financial Crisis

(Terzi, 2020), or not be in the condition of being supportive, should a new macroeconomic shock occur.

Fourth, Peruzzi and Terzi (2018) have shown that growth accelerations, meaning a structural and sustained increase in growth rates, remain rather elusive in advanced economies, and are typically associated with wide-reaching structural reforms. This argument speaks to Daniel Gros' view that the effect of the EU's Recovery and Resilience Facility will hinge mostly, if not fully, on whether it triggers wide-reaching structural reforms: something that remains far from obvious (Gros, 2020). In a way, this echoes the findings of Eichengreen and Uzan (1992), who looked at another major historical international reconstruction and investment programme – the Marshall Plan – and concluded that its greatest impact was not through standard macroeconomic channels such as financing infrastructure repair, fostering investment, and augmenting imports. Rather, it greatest economic effects took place by twisting the political economy of Western European countries in favour of social market reforms, including the liberalisation of production and prices.

Finally, taking a more global perspective, advanced economies have bought the vast majority of available vaccine supplies for 2021, in the hope of being able to save lives and re-open their economies swiftly. High-income countries, representing 16 percent of the global population, have bought at least 70 percent of COVID-19 vaccine doses available in 2021 (Gostin *et al*, 2020). However, the global nature of supply chains suggests that production and trade will remain disrupted so long as developing countries are affected by the pandemic. Çakmaklı *et al* (2021) have recently shown that up to half of the coronavirus-related economic damage in 2021 could still accrue to rich countries, even assuming fast and complete vaccination rates for their citizens. Beyond trade and production, the continued proliferation of the virus in other countries implies a persisting risk of vaccine-resistant variants developing and spreading globally (Brown *et al*, 2021). In other words, Covid-19 could have a protracted impact over years, which

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will not be resolved by a fast vaccination campaign in the next few months, hampering the prospects of a roaring decade. In January 2021, the academic journal *Nature* asked more than 100 immunologists, infectious-disease researchers and virologists working on SARS-CoV-2 whether it could be eradicated. Almost 90% of respondents think that the coronavirus will become endemic — meaning that it will continue to circulate in pockets of the global population for years to come (Phillips, 2021).

4. Conclusions

After reviewing both arguments in favour and against, a replication of the 'roaring 20s' looks far from granted for Europe as a whole. However, what cannot be excluded is that an economic boom might materialise for selected countries within the European Union, perhaps on the back of a more successful rollout of the Recovery and Resilience Fund (RRF), or an export-led model anchored to the resumption of global growth. We saw indeed how exits from moments of crisis can pave the way for a differentiated recovery, even within a general supportive growth environment, as happened in the early 1920s. Furthermore, large mega-trends like the shift to a new growth model based on the digital or green economy, and the challenges related to aging, could further exacerbate the problem of uneven growth within the Union.

Different recovery paths, or a localised re-edition of the 'roaring 20s', would have repercussions in terms of widening divergences in the EU on a variety of policy indicators. On the fiscal front, some countries might be better placed to rapidly re-absorb the high public debt levels incurred as a result of the Covid-19 crisis response. On the monetary policy front, diverging paths of economic success might once again create a 'one size fits none' problem for the ECB (Enderlein, 2005). On the internal migration front, an uneven recovery could spark once again large involuntary migration of young people, as experienced following the Eurozone crisis, with vulnerable countries losing precious human capital. Evidently, all this would have rippling repercussions on political cohesion and consensual decision-making on the way forward in terms of EU policy integration. Within this context, national governments should avoid complacency inspired by parallels with the ‘roaring 20s’. The ambition and quality of the public policy response to the crisis, including the degree to which RRF funds are well spent, and coupled with wide-reaching structural reforms, is ultimately what will define economic prospects in the ‘Twenties’ of the 21^{st} century.

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[i] See The Economist (2021), "Why a dawn of technological optimism is breaking", 16 January.
[ii] Between 1919 and 1920, federal troops were employed to assist in putting down labour disputes and other public disturbances 29 times.
[iii] Evidently, this rests on the assumption that the economic fallout from Covid-19 will not generate a subsequent financial crisis: something that will require careful timing and sequencing of policy support withdrawal.
[iv] See Simon Kennedy (2021), "Consumers Saved $2.9 Trillion During the Pandemic. Their Money Will Drive the Global Recovery", *Bloomberg*, March 3.
[v] A similar point was recently made by Janan Ganesh (2021), "What really roared about the Twenties", *Financial Times*, January 8.
[vi] See Stephanie Flanders and Lucy Meakin (2020), "Is the Pandemic the Answer to the Productivity Puzzle? Bank of England Chief Economist Andy Haldane gives his take on 2021", *Bloomberg*, December 23.
[vii] More broadly, the pandemic has probably pushed several firms, including SMEs, to enter the digital market, creating a more competitive environment. It is therefore possible that following the peak of the pandemic, and once the economy reopens, some Schumpeterian creative destruction effect could be at play.
[viii] https://www.anderson.ucla.edu/centers/ucla-anderson-forecast/forecast-direct/february-2021