In Conversation with Jean Tirole

Gabrielle Desalbres

Jean Tirole is a French economist who specialises in regulation, behavioural economics, industrial organisation, finance, banking, and macroeconomics. Considered one of the most influential economists of our time, he was awarded the Nobel Memorial Prize in Economic Sciences in 2014 and the CNRS Gold Medal in 2007. He is currently Honorary Chairman of the Toulouse School of Economics (France) and of the multidisciplinary Institute for Advanced Study in Toulouse (IAST), Visiting Professor at the Massachusetts Institute of Technology (MIT, US), and a member of various public policy committees. In 2017, Jean Tirole published Economics for the Common Good*, a general-audience book translated into 14 languages. He is also a Corresponding Fellow of the British Academy and an Honorary Fellow of the Royal Society of Edinburgh. He and MIT economist Olivier Blanchard have recently been appointed by President Macron of France to make proposals to address post-COVID-19 economic challenges. In conversation with Cambridge first-year historian Gabrielle Desalbres, he discusses the management of the COVID-19 crisis and the different paths to economic recovery.*

Crisis management

***CJLPA*: In March 2020, the COVID-19 pandemic forced many states to implement national lockdowns, resulting in the interruption of almost all economic activity. Whilst the economic recovery from the 2007–08 subprime crisis was still fragile in most Southern European states, it was crucial for governments to intervene quickly and with sufficient means to avoid mass unemployment, social unrest, and widespread company bankruptcies. States are therefore borrowing at unprecedented levels. But how long can this last?**

Jean Tirole: How much debt can a country sustain? There is no magic number; a 40% debt-to-GDP may be unsustainable for one country, while another can sustain 200%. It all depends on a range of factors: the country's fiscal capacity (can it increase taxes further if needed?), its rate of growth (a given debt burden is much lighter in relative terms in a growing economy), the debt maturity (a short-term debt creates more pressure on countries to disgorge money for debt repayment than debt whose repayment is far into the future), the countries' dominant political constituencies (which shape public policies, as was observed in the case of German exporting industries), or the debt's 'home bias' (the percentage of debt held domestically. The higher this number, the lower the country's incentive to default: over 90% of Japanese debt is held in Japan, so a sovereign default would amount to Japan's shooting itself in the foot. By contrast, over half of the French sovereign debt is held by foreign investors).

Another lesson is that measuring debt is highly complex. Indeed, countries (and also regions, municipalities) do their best to hide new debt as 'off-balance exposures', despite improvements in Europe in their accounting a few years ago. Off-balance exposures are contingent liabilities which may or may not lead to a future disbursement: guarantees given to social security systems and public enterprises, ECB guarantees though the European Stability Mechanism, collective borrowing under joint and several liability per the European 2020 stimulus package, the securitisation of future revenue, and the use of derivatives (credit disguised as swaps) to conceal indebtedness. Even unfunded pensions, a big item in the pay-as-you-go pension systems of France and many other European systems, are counted as a contingent liability, even though citizens expect their pensions to be paid for sure … All those items are not part of a country's formal debt, but they are certainly part of the debt.

***CJLPA*: Can governments keep borrowing?**

JT: The pandemics have triggered an extraordinarily high increase in public debt. No-one exactly knows how big this increase will be in the end. This depends on how efficient we will be at ending the pandemic, but it will also depend on the subsequent macroeconomic crisis. In a country like France, many firms have taken on debt from the government (loans, unpaid social security contributions…). This debt, combined with the lost earnings during the pandemics, will make it hard for firms to finance new investments or even to survive. Some of it will just be forgone, adding to the state's indebtedness. Tax revenues will also decline in the recession relative to the pre-Covid situation. And austerity might kill the economic recovery.

The increase in the public debt burden is a concern not only for emerging countries, but also for Southern Europe. The hard question is whether it is sustainable. As we discussed earlier, this depends in particular on whether countries will grow faster than the rate of interest at which they borrow. Can they roll over their debt or do they get in dire financial straits? The rate of growth is likely to be low in the years to come, but so will the rate of interest despite high public debt (high volumes of public debt in principle go together with high yields on them to attract enough savings). Precautionary savings and low corporate investment mean that savings will be high and the corporate demand for funds low, so savers will receive low returns. In theory, therefore, this large increase in public debt may be sustainable, but there are two caveats as is clear from the previous argument. First, the rate of growth must remain above the rate of interest for a substantial amount of time. Second, trust must be maintained and there must be no speculative attack. A country whose economic growth is at 1% can borrow very large amounts at a 0% rate of interest, but if doubts about country repayment emerge, international markets will demand a 'spread', say a rate of interest of 5%, and public finances will quickly be drained. Such speculative attacks are self-fulfilling phenomena and may (or may not) occur when the country is highly indebted.

Although one cannot have certainties in the presence of self-fulfilling phenomena, the situation is risky. One possible approach is to avoid contracting output through tight budgetary policies, but assuage the markets' fear of profligacy by signalling intentions to better manage public expenditures and reorient the latter toward more investment and less consumption. Indeed, investment is what will create the conditions for the sustainability of the debt in the future.

***CJLPA*: An alternative might be to repudiate the debt...**

JT: Two proposals are on the table. The first is to cancel the debts held by the central bank. A letter recently circulated within the Eurozone countries to call for the cancellation of debt held by the European Central Bank (ECB). This makes no sense. We would be defaulting on ourselves, because the ECB belongs to European citizens. Indeed, the ECB's profit, net of its day-to-day running expenditures, is paid back to the member states' treasuries. So what we would gain on one side—the alleviation of debt repayment—we would lose—exactly the same sum—on the other side. It is a mere *jeu d'écriture*. Erasing the debt held by the ECB could alleviate the disparities between member states but it would consist of a fiscal transfer. Such a project would inevitably be opposed by Germany and the Netherlands whose public finances are strong compared with the rest of the EU, and would heighten the tensions between member states even further.

Some economists make a parallel between 'coronabonds' and the erasure of the debt held by the ECB, but the two are different. Member states have agreed to borrow jointly by issuing treasury bonds to cover the increase in public expenditures incurred during and after the sanitary crisis, thus securing common interest rates on the financial markets. But, except for the grants component of the program (which de facto is a set of transfers among countries), each member state in principle has to reimburse its own debt.

The second proposal is a broader default, euphemistically called 'restructuring of the debt', which would include among its victims private investors, and not only the central bank. Some of the cost of such a default of course would again be inflicted on the country itself. Italian banks hold a lot of Italian government bonds. A repudiation of the latter would weaken the Italian banks substantially and for some of them would lead to a bailout by the Italian government …

But even if the default had no direct financial impact on the country itself, it would still be problematic. Financial markets would lose trust in the government and refuse to lend to it, or lend at very high rates, for a number of years. This means that the government would have to more or less balance its budget overnight, which it has not done for a while (almost 50 years in France) and would definitely not be advisable in the forthcoming recession.

***CJLPA*: What about inflation?**

JT: Inflation is a concern when a crisis occurs: the glut created by central bank injections of liquidity may in theory translate into inflation, too much money chasing too few goods. However, deflationary expectations and high precautionary savings by households and banks may reduce the spending and counter this natural trend. Indeed, the quantitative easing policies implemented by the Federal Reserve (Fed) and the ECB in the last decade did not lead to inflation and the jury is still out for what will happen this time.

Post-crisis management

***CJLPA*: You are a specialist in behavioural economics. In that regard, do you think economic agents will change their habits of consumption and lifestyles?**

JT: To be honest, we don't have a good answer to this, only a few hints. Ideally, having learnt about our collective fragility, we should come out of the crisis more prone to solidarity and more eager to substitute investment for consumption to prepare our common future, which includes being more respectful of our environment. But such a reckoning, such an embrace of a more forward-looking society, is not a foregone conclusion.

Part of the reason is that our beliefs are motivated. To give some analogy, we like to think that accidents and illnesses only afflict others, not ourselves or those close to us. This can lead to harmful behavior, such as driving carelessly or not looking after our health (though this may not be entirely negative since worrying less also improves our quality of life). We dream of a world in which the law would not have to encourage or constrain people to behave virtuously, a world in which companies would stop polluting and avoiding their taxes, in which people would drive carefully even without police officers around. That is why movie directors invent endings that meet our expectations.

Just as in the case of driving and health behaviour, motivated beliefs, by making us more optimistic about the future, may lead to bad policies. Many people are (correctly) convinced that climate change is an existential threat, but they repress these thoughts. Or they believe that they should not have to incur a cost themselves to reduce their emissions: it is up to the others to do so. Or else they hope that the problem will solve itself thanks to phenomenal technological progress. In a similar spirit, nations which have had serious financial problems and have thereby lost their economic independence to the markets and the international official lenders and seen their growth vanish, most often have been oblivious of the incoming threats.

Will we behave differently with others after the crisis? Whether civil, international, or sanitary, wars leave their mark on society. Faced with anxiety-provoking events, people may reconsider their goals in life. Research in the social sciences shows that our individualistic tendencies decline, and we display more empathy. We behave more cooperatively and altruistically and are more likely to join social groups. Much of this new altruism however is parochial—it is directed toward those who are 'on our side'. But unlike internal wars, external warfare generates common interests that bridge the gaps across groups. In the war against COVID-19, the in-group extends to all mankind and there is no out-group other than the virus, provided that 'every country for itself' fails to prevail. If this crisis exhibits the same gap-bridging pattern, this might be good news given the recent trend toward populism, nationalism, and ethnic and religious intolerance.

***CJLPA*: The current pandemic has resulted in an increased gap between the globalised élites and the left-behinds. How could these growing inequalities be managed?**

JT: Inequality, which had already grown substantially (with differences across countries: they have grown much more in the UK and the US than in France), has been exacerbated by COVID. The young and the workers in gig jobs in particular have suffered: many self-employed workers in the service sector have been struggling to make ends meet.

But inequality is not limited to income or labour market inequality. One of the most detrimental forms of inequality is the educational one, as it underlies the equality of opportunity—a really fundamental one. Prior to the sanitary crisis, access to a good education was already highly socially determined. Things have gotten worse during COVID. In France or in the UK, top schools, from primary schools to higher education, have overall kept a relatively normal functioning, while pupils in disadvantaged ones often lost proper access. Covid has reinforced the impact of parents and housing conditions on school performance. This won't have immediate consequences, but does not bode well for future growth rate and especially for a better access to good jobs, except for the happy few.

***CJLPA*: What do you think of the idea to implement a universal basic income? Could it be a solution to the growth of inequalities and to the ongoing upheavals brought by artificial intelligence (AI) to the job environment?**

JT: Every country has some form of minimum income already, although not for everyone (the *RSA jeune* in France for the under 25 has strict conditions). I find the debate rather confusing, in part because of semantic issues. It is crucial to specify how the tax structure would change in reaction to the introduction of a universal basic income. There is no reason to give access to this income to middle-class or well-to-do households, keeping the tax schedule as it is. This would be as senseless as was, on a smaller scale, Trump's $2,000 COVID check for all. It would be extremely expensive for public finances and would not serve the goal of protecting citizens in dire financial straits. But if one offsets this transfer by altering the tax structure, de facto taking the money back from middle-class or well-to-do households, this is no longer a universal basic income. I therefore imagine that advocates of a universal basic income have in mind social protections and social transfers rather than a universal basic income.

There are two potential issues with a sizable universal basic income: its cost for public finances, that can crowd out other public expenditures such as education or health; and a potential lack of incentives to reenter the labour force. (There are other issues in the case of very asymmetric incomes within the household—should the state provide the spouse of a well-to-do individual with a minimum income?—which can be solved by making the allowance means-tested.) One should preserve incentives to work. That may imply a combination of a lower minimum wage and a more generous negative income tax (*la Prime d'activité* in France, and the Universal Credit scheme in the UK), because too-important social transfers at the bottom discourage workers from taking poorly paid economic activities. In France, there are cases in which people prefer to be unemployed and to receive social benefits rather than taking a job which would, in the end, be less financially advantageous than not working at all.

AI is bringing new challenges and crucially, it is making the labour market even less welcoming to unskilled people. Here, the universal basic income is not the solution either because work is a source of dignity, a means of social recognition, and a structuring occupation. Places where unemployment rates are high exhibit more social trouble and crime. That is why more governments should be eager to develop continuing education programmes for the unskilled and those whose jobs will be affected by the AI revolution.

Finally, there is the issue of the youths—students, apprentices, etc. There could be support measures that are conditioned on milestones, such as passing the exams—in France university scholarships are too often unconditional. One can also envision low-cost loans to be reimbursed later on (up to some limits, to avoid over-indebtedness), with again the money handed out conditional on progress in the selected track. One of the major forms of inequality among students, together with the lack of information about the skill premium and the good tracks at school and university, is the need for poor students to have a part-time job on top of their studies.

***CJLPA*: In the UK, there are calls to set up a wealth tax to reimburse the COVID debt. In France, the wealth tax is a recurring source of debate. What do you think of a wealth tax and how effective is it in bringing new sources of revenue for the states?**

JT: I am not an expert on this, and will content myself with a couple of remarks. First, regardless of one's stance on the issue, there is agreement that the recent abolition of the wealth tax in France involved only small amounts of money: the cost of the switch to a tax on real estate wealth is estimated at around 2 or 3bn € per year, about a thousand times smaller than GDP. One may be in favour of or against the wealth tax on symbolic grounds, but the economist has little to say on that. Second, to have a better idea about the implications of a wealth tax, other issues need to be discussed, such as its relationship to other existing taxes such as capital taxation and the inheritance tax, as well as the likely fraction of successful citizens who emigrate to escape the wealth tax, a fraction on which we don't have good estimates. We don't have international agreements that would allow us to levy a uniform tax, say, in the West. Most economists concur on the idea that taxing better would be facilitated by international cooperation.

***CJLPA*: How has the COVID crisis impacted the gap between the Souths and the Norths, within the EU and beyond? Do you think the pandemic has accelerated the divergence between China and the West?**

JT: Like traditional wars, the pandemics will redistribute the cards, although we have little knowledge on the magnitudes. So, if you are willing to take the following with a grain of salt, I would expect Germany to strengthen its economic role within the European Union. It entered the pandemic with much stronger public finances than most other member states, and so it could afford spending much more money to protect its firms, which were already more successful than European firms.

At the international level, the monetary and economic hegemon, the US, has suffered a blow through its mismanagement of the pandemic, and a much higher blow still from the Trump years more generally. The policies of the last four years have been very short-termist: denial and inaction on the climate front, loss of international credibility and undoing of the world multilateral order, protectionism, high public spending, tolerance of high inequality. The US has resources though, in particular access to the world's top universities and a flourishing innovation ecosystem. It also has much leeway in raising taxes to stabilise public finances, and its currency is still internationally dominant.

But China will probably emerge strengthened on the international scene, and it has been massively investing in education and R&D so as to become an innovation powerhouse. The times are long over in which it focused on commodities. Emerging and less-developed countries will be penalised if they don't gain quick access to cheap and easily deliverable vaccines. This is really a concern. China and Russia have noted this and are using soft power by providing vaccines (they had earlier provided medical supplies) to a number of countries in Latin America, the Middle East, Turkey, Brazil, and the Balkans. Vaccine diplomacy is also used by India with its neighbours. In contrast, the WHO COVAX initiative of vaccine procurement for poor nations has had a slow start.

***CJLPA*: This pandemic has shed light on the EU and the UK industrial dependency on China and other emerging economies, with all the consequences we know. Some politicians have called for a targeted reindustrialisation. But is it really possible in practice?**

JT: Globalisation progressed very rapidly from the seventies to the global financial crisis. This growth is due to a number of factors: technological evolution (the ICT revolution, containers), multilateral and especially regional trade agreements, and the accrual of a new labour force from communist countries (China, Eastern Europe…).

There have been many calls, especially since COVID, to re-localise the value chain. I doubt that this will happen on a large scale. Indeed, the fixed costs of offshoring have been incurred already. They are in large part sunk: the value chains are in place and they are sticky. Besides, the solutions to supply disruption can often be found abroad: even in the health sector, French citizens benefit substantially from their access to foreign vaccines. Relocation is not synonymous with resilience: disruptions in France were linked to China in January 2020, to Europe in April 2020.

***CJLPA*: Are the benefits of globalisation worth the cost?**

JT: There are two distinct issues that are often confounded. The first relates to globalisation in general. Globalisation is overall beneficial, but it creates winners and losers. It provides consumers with access to the best the world has to offer; it frees them from being captive to powerful domestic producers and distributors. It creates jobs in exporting industries. But it also destroys jobs in exposed sectors, as workers in the US, the UK, and Europe have learnt the hard way with the 'China trade shock'. The new jobs that are being created often are not created in the same region, or necessitate different skills. Furthermore, we have not been very good at protecting workers after they lose their jobs, and also before they do (by reskilling them), again with differences: continental Europe has a more extensive welfare system than the UK and especially the US. The problem, therefore, is that trade has major distributional effects that are salient, more so than technological progress, and lead to bad politics.

Advanced countries must move upmarket. They cannot compete on wages, so they need to go for high-value-added segments, what Germany has done better than anyone in Europe (or what the US has done in the tech and pharmaceutical segments). But this requires substantial R&D, worker training, a better education, top universities, making industrial jobs more attractive in school…

The second issue is that of bringing back home a number of 'essential activities' that were offshored in the last 40 years. The goal of such 'reshoring' is to protect ourselves from disruptions in the value chain, geopolitically motivated or resulting from a natural disaster. For me, 'home' means Europe, which has a more reasonable scale than member countries. Production is often subject to high returns to scale, and member states often do not have the required scale to sustain a competitive industry.

We need to make a distinction between supplies that are essential in times of crisis, and ordinary consumer goods. For the former, the market just doesn't work. It generates extremely high prices and market power in periods of shortages. Those familiar with electricity systems will note the analogy with power plants which are used for a few hours—ultra peak—a year. For the latter, the diversification of the supply chain is the prerogative of companies.

The issue for public policy will be to resist lobbies, which will seek either protection or preferential treatment in public procurement, claiming that their activity is 'essential'. It is not clear to me for example that food or supermarkets are part of countries' sovereignty, especially in Europe which has maintained its agriculture. But of course, military equipment and critical healthcare resources may allow our countries to be less subject to geopolitical blackmailing or be more resilient in case of a world shortage of supplies. My point here is that we need to be flexible. Do we need to relocate or simply constitute stocks to protect ourselves against temporary shortages? Is the supply chain sufficiently diversified across the world? Can we use refitted equipment or 3D printing to make up for a temporary shortage? There is no universal answer and a case-by-case approach must be used.

***CJLPA*: Are economic activity and action against climate change compatible?**

JT: Almost 30 years after the Rio summit, we still have done little to address the truly existential threat of global warming. Solutions exist, and I do not believe in the end of growth, but we must accept some temporary cost in our standards of living. At the opposite end of the spectrum in the debate, I do not believe in the concept of green growth, according to which we could have our cake and eat it too, either. If such a win-win were to hold, why is almost every country in the world concerned about reducing its carbon imprint? Let's have the courage to say that our planet is worth some effort.

The solution will come primarily from incentives. A sizable carbon tax will induce households, corporations, and administrations to do something serious for the planet: even a relatively small carbon price can have large effects in some cases, as the UK's exit from highly polluting coal since 2013 demonstrates. To be certain, some of these actors have already started to act because they are afraid that their assets end up stranded when carbon will be phased out totally. But this is not sufficient.

And pricing carbon must be complemented with multiple measures. These include compensation of households who lose from carbon pricing (the absence of compensation played a role in the '*gilets jaunes*' revolt in France), the use of standards whenever carbon pricing is difficult to implement, a very intense R&D effort, and of course a multilateral approach. 'My country first' is a sure recipe for an ecological disaster.

***CJLPA*: How do you understand the role of the economist in the polis?**

JT: Economics is a deeply normative field. To produce a policy framework and try to make this world a better place, it analyses situations in which individual interests are in conflict with the collective interest and how to set these individual interests to music so that they work for the common good.

But public policies require voters' support, and therefore information about the tradeoffs involved in the choice of specific policies. The second role of economists, and experts more generally, is as conveyors of knowledge. This is not an easy task, as many policies are complex and have unintended consequences. Most academic economists spent their entire life in a research environment and, with their jargon and caution in the presence of complex effects, do not always communicate well. And because, like all scientists, their DNA is doubt, they are not at ease with the soundbites and certainties characteristic of much communication today. In any case, a properly functioning democracy is one in which citizens have sufficient knowledge of tradeoffs. There is a role for acculturation. It is therefore important to make economics widely accessible and even fun, for economics resembles any culture. Like music, literature, or sports, the better we understand it, the more we like it.

Before the Nobel, I spoke to economists and experts in ministries, regulatory authorities, companies. The Nobel was a tipping point. I met quite a number of people, sometimes just unknown people in the street, who simultaneously demonstrated a real interest, but had many questions about what economists do, whether they are useful, whether economics is a science, whether the key challenges we face can be solved. This made me aware of my responsibility to get out of my laboratory, explain my job, and share more of my knowledge, not being a news commentator but simply talking about what economic research has to say about our world.

***CJLPA*: But experts can also fail…**

JT: Experts' judgment may be impaired by money, friendships, a desire to become a 'public intellectual' and occupy the media space, a political agenda. A 'neutral expert' is of course a bit of an idealisation. Transparency rules about financial conflicts of interest are useful but necessarily imperfect, and the other forms of conflict of interest are even harder to detect. So in the end, individual and collective ethics—including the obligation of not saying in the public space things one would not stand for in a seminar room in front of peers—are needed. But experts are the best we can avail ourselves of for our democracies to function well. Without them, any argument, any narrative, goes.

In these times of populism, people with expert knowledge are dismissed. Populists exploit the ignorance and prejudice of voters. They fan widespread hostility to immigrants, distrust of free trade, and xenophobia, and play on people's fears. They excel at exploiting real and justified anxieties about technological change and employment, the financial crisis, the slowdown in economic growth, rising debt, and increasing inequality. No wonder that all over the world their speech often echoes Michael Gove's pre-Brexit 'people in this country have had enough of experts'. And of course, populist programmes have contempt for elementary economic mechanisms. Hence, whatever their field of study, experts—provided that they are humble and transparent about what they know and don't know, that they recognise they are not familiar with everything but have a rather specialised knowledge—are more valuable now than they have ever been.

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