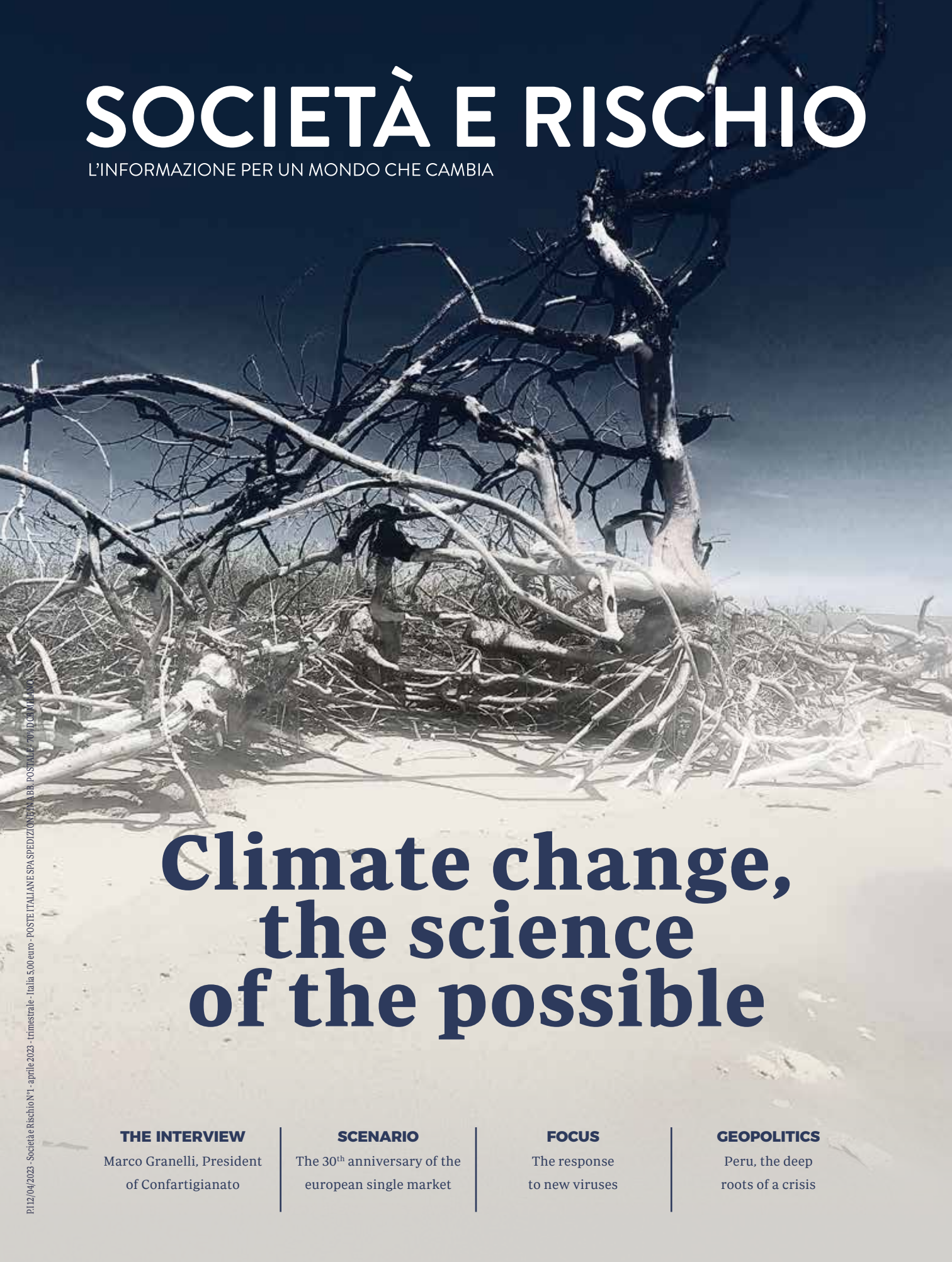


SOCIETÀ E RISCHIO

L'INFORMAZIONE PER UN MONDO CHE CAMBIA



Climate change, the science of the possible

THE INTERVIEW

Marco Granelli, President
of Confartigianato

SCENARIO

The 30th anniversary of the
European single market

FOCUS

The response
to new viruses

GEOPOLITICS

Peru, the deep
roots of a crisis



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Maria Rosa Alaggio
Editor-in-chief



The perceptibility of the connection between society and risk

What are the economic, political, social, environmental and technological changes that are affecting our daily lives, work and the way we look at the future? And how do the rapid developments we are witnessing present us with hazards that need to be known and addressed from a broader perspective, based on the search for security and concern for the common good? *Società e Rischio* (Society and Risk, hereinafter “the magazine”) stems from the conviction that there is now an increasingly closer link between changes in society and the need to interpret risk in order to find new ways and solutions for the benefit of individuals, businesses and the community.

Commencing 2017, since the birth of its digital version (www.societaerischio.it), the magazine has been publishing news, analysis and insights on how the economy, social and demographic dynamics, natural events, and technology impact our lives giving rise to issues needing a political response, international collaboration, ground networks, entrepreneurial capacity or the strength of even isolated actions. Just think of the legacy we have inherited from the last three years. In a short time, our certainties have turned upside down and the black swan, alias the pandemic, has revealed human frailties by triggering health, economic, social emergencies.

Reality tells us, therefore, that the relationship between

society and risk is not a terrain for philosophical dissertations but is the room we live in. It represents the big issues such as welfare, financial crises, the need to revive manufacturing, and climate change.

This is why the magazine focuses, as way of example, on the concerns of Italians, who are currently afflicted by inflationary trends and the need for economic security. As for the corporate world, the revival starts from the request to shrink bureaucracy and the burden of taxation, new labour policies and support for internationalisation.

In the background proliferate the new scenarios that climate change produces with its devastating effects, or those technological evolution is able to generate between virtual spaces and actual threats.

The complexity of this world solicits the commitment of institutions and amplifies the urgency to act in our daily lives to implement initiatives aimed at raising awareness among the population, citizens, and businesses. On the other hand, we also need tools for the dissemination of issues that require the ability to manage change. The objective, and also the goal of the magazine, in such context, is precisely that of fostering the spread of culture so that risk can be transformed, in a way or another, to devise and foster a better future.

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Summary

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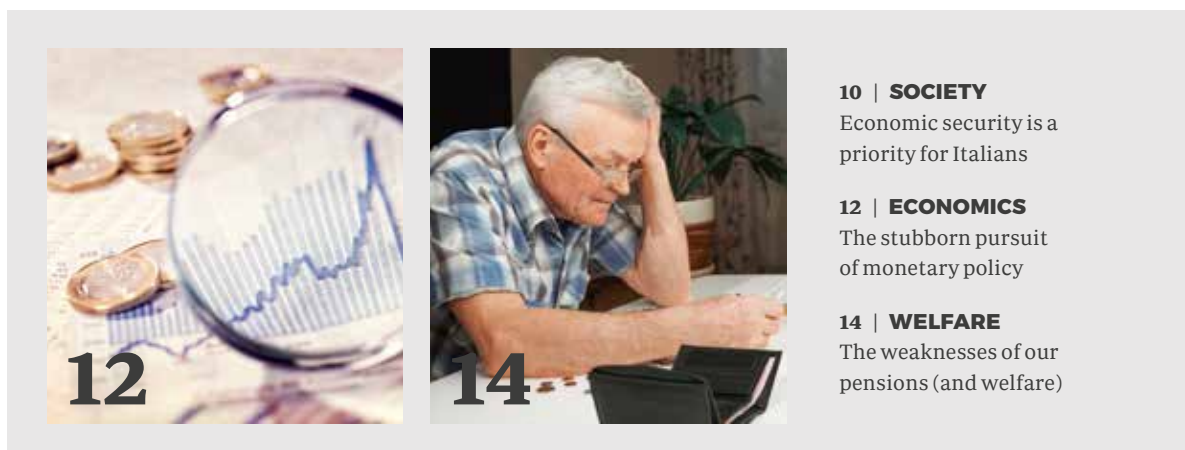
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A vaccine for bees

The **Food and Drug Administration** (FDA), the US food and drug regulatory agency, has provided the green light to a vaccine against the American foulbrood that is decimating the bee population. The drug will be included into the food usually fed to worker bees, thus infiltrating the production cycle of royal jelly and, consequently, into the diet of the larvae and queen bee: the new specimens, which have been exposed to the bacillus, should therefore be immune to the disease. The American foulbrood has turned out to be devastating for bees, a species that is fundamental for the safeguard of biodiversity and that, according to some research, is 'almost at risk of extinction' consequent to the growth of intensive farming, the use of pesticides and climate change.



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E-cigs and their disposal

The last **Optime** assembly, the observatory for the protection of the electronics market in Italy, devoted much time to the topic of disposable electronic cigarettes. The event reiterated that the device is to all intents and purposes an electronic gadget and, as such, its disposal must follow the regulations applied to *WEEE*, i.e. waste electrical and electronic equipment. At the moment, however, there is a great deal of confusion on the subject. Disposable electronic cigarettes are also enjoying great success in Italy. According to the Customs and Monopolies Agency, the market amounts to between 6.8 and 13.5 million units. Considering that each e-cig contains at least 0.6 grams of lithium, the incorrect disposal of this device could result in a loss of four million tonnes of lithium, enough to produce over 300 electric car batteries.

Cyber risk, record number of attacks in 2022

Year 2022 was 'the worst ever for cyber security'. According to the latest **Clusit** report, cyber-attacks worldwide reached a new all-time high of 2,489 major incidents that became public knowledge, marking a 21 per cent year-on-year increase. The monthly average hit a new record of 207 cyber-attacks, with a peak of 238 incidents occurring in March 2022, overlapping with the start of the war in Ukraine. Italy, which is now fully in the crosshairs of hackers and cybercriminals, also suffered: a total of 188 cyber-attacks were detected in 2022, 169% more than the previous year. The vast majority of incidents (83%) were of a severity defined as high or even critical.

Genome editing, tests on over 200 people

Over 200 people have undergone a human genome editing test for the treatment of diseases such as cancer, vision loss and amoloidosis. The announcement was made by **David Liu**, a member of the *Broad Institute at Harvard University and the Massachusetts Institute of Technology*, at the Third International Summit on Human Genome Editing held in London in early March. Liu reported the case of Ayssa, a UK teenager diagnosed with leukaemia. With no improvement after several sessions of chemotherapy and a bone marrow transplant, the patient underwent treatment based on *Crispr*, a human genome editing technique. The test seems to have worked. 'At the moment, about ten months subsequent to the treatment, the cancer is undetectable,' Liu said.



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Cricket flour comes to the table

The European Union has greenlighted the use of the partially defatted *acheta domesticus* powder, the domestic cricket, for food purposes. A recent regulation has given permission to the sale of products made by **Cricket One Co. Ltd**, a Vietnamese company that had applied to the European Commission in 2019 for authorisation to market what is known as cricket flour. The green light from the European institutions came after clearance from **EFSA**, the European Food Safety Authority, which concluded that 'the partially defatted

powder of *acheta domesticus* is safe under the proposed conditions and levels of use'. The ingredient can now be utilised in products such as bread, crackers, breadsticks, and biscuits. The presence of the ingredient will have to be clearly stated on the label, since, as the regulation explains, it 'may cause allergic reactions in people averse to crustaceans, molluscs and dust mites'.



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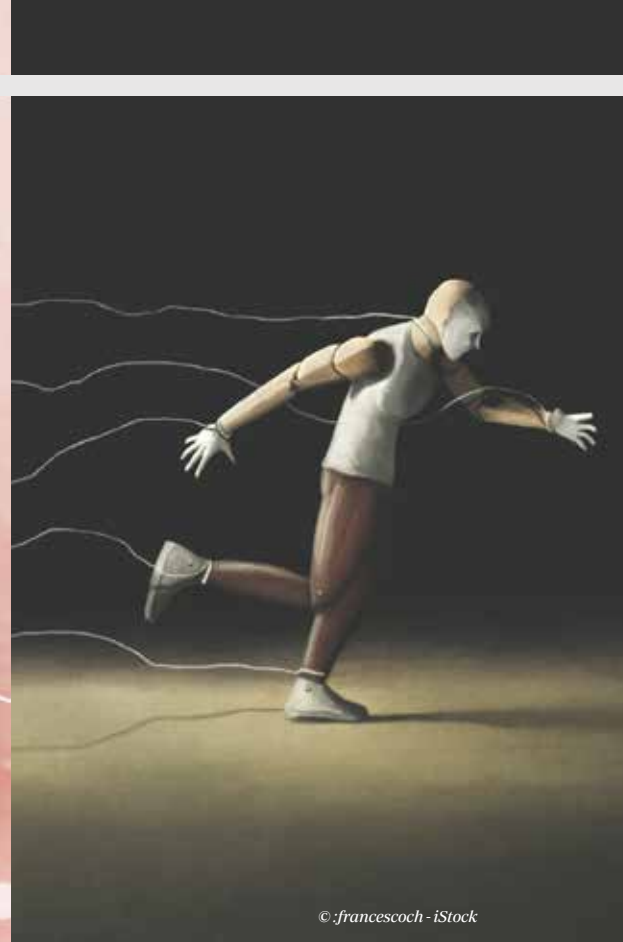
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Contact lenses for virtual reality

A team of researchers at the National University of Science and Technology in Ulsan, South Korea, has developed an innovative technology for smart contact lenses that can implement augmented reality-based navigation through 3D printing. The solution, announced in the journal *Science Advanced*, would have numerous advantages over the traditional virtual reality viewers that began to spread with the metaverse. The small size, for instance, would offer greater ease of use and limit the inconvenience of carrying around a clumsy and bulky visor. Production and marketing costs would also be limited, thus favouring the spread of virtual and augmented reality software and platforms.

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Gen Z, fleeing from work

Young people are increasingly dissatisfied with the labour market in Italy. According to the latest edition of the *Osservatorio BenEssere Felicità* (Well-Being Happiness Observatory) of **Ricerca Felicità Associazione** (Research-Happiness Association), almost 60 per cent of the so-called *Generation Z*, i.e. the young and very young entering the labour market in recent years, are mulling a change of jobs. At the root of the trend is above all the perception that one's work merits are not getting a proper recognition: the satisfaction index, on a scale from 1 to 6, has fallen from 4.34 in the previous survey to the current 3.51. The sense of belonging to one's own company is also bad, with the net score dropping from 37.3% in 2022 to 13.6% this year.

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Hikikomori, 54,000 youth locked in their homes in Italy

At least 54 thousand Italian adolescents define themselves as 'hikikomori'. According to a survey by the Institute of Clinical Physiology at the **National Research Council** in Pisa, promoted by **Gruppo Abele** in collaboration with the **Università della Strada** (University of the Street and the Road), the phenomenon affects 2.1% of the student population aged 15-19. The Japanese term hikikomori can be translated as *social withdrawal* and indicates the tendency of the young and the very young to stop leaving their homes, locking themselves up in their rooms and keeping contact with the outside world only via the Internet. According to the research, 18.7 per cent of the respondents have not left home for a significant time and, of these, 8.2 per cent have not done so for between one and six months. A further 67,000 young people are at risk of turning into hikikomori.

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TikTok, the European Union Announcement

The European Union is banning *TikTok* from smartphones and digital devices of employees of the European Commission and the European Council. Underlying the decision would be fears for the IT security of the EU institutions. **Thierry Breton**, European Commissioner for the Internal Market, spoke of a "strong focus on cybersecurity protection and it is on this," he explained, "that we have taken this decision". The move was also replicated a few days later by the European Parliament. "Following concerns about the digital security of the TikTok social media application, the president and secretary general of the European Parliament have taken the decision, in line with the other European institutions, that from 20 March 2023 TikTok will no longer be allowed to be installed on the European Parliament's business phones," an official note reads. "Access to TikTok from the Parliament's wi-fi or computers will also be banned. Furthermore," the statement continues, "we strongly recommend MEPs, their staff and Parliament employees to remove the app from their personal phones as soon as possible."



ECONOMIC SECURITY IS A PRIORITY FOR ITALIANS

Livio Gigliuto
Vice-President, Piepoli Institute

Once the pandemic and fears for their own wellbeing and that of their families have passed, the majority of those interviewed say they feel safe. Immigration risks seem to have been overcome, while financial issues and inflation are a concern

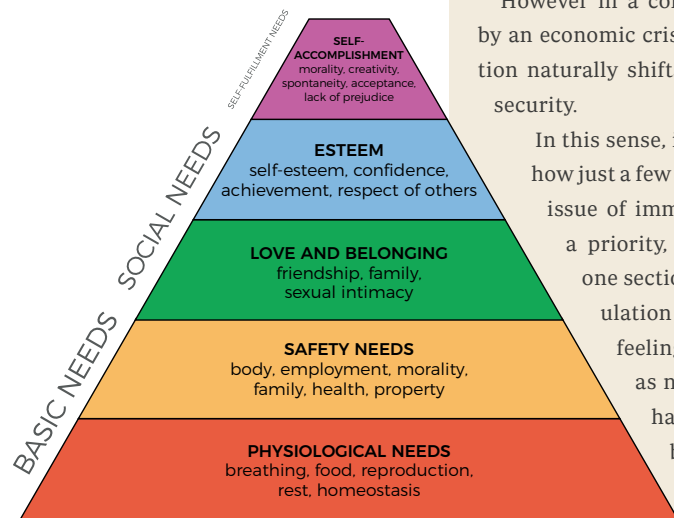


Livio Gigliuto, Vice-President, Piepoli Institute

sample of citizens, who gave us a somewhat surprising answer: 84% of Italians, i.e. the vast majority, feel safe. Interestingly, this figure is transversal, i.e. regardless of the geographical area in which one lives, the size of one's town, age or gender. Setting aside the pandemic crisis and the related concerns about the primary risk, the physical and survival risk, Italians feel quite safe.

However in a context marked by an economic crisis, our attention naturally shifts to financial security.

In this sense, it is graphical how just a few years ago, the issue of immigration was a priority, perceived by one section of the population as crucial to feeling safe, whereas now this issue has fallen to the bottom of the priority list.



In Maslow's pyramid of needs, physical safety is, together with physiology, the basis of the needs that human beings tend to resolve for themselves and their loved ones. Only once health is protected can one devote one's life to other needs.

How safe do Italian citizens feel at the moment? Of course, the concept of security is made up of a number of factors, but we asked a direct question to a representative

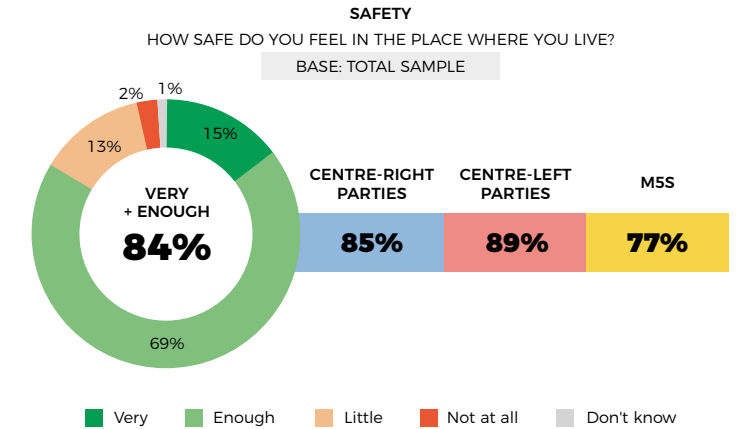
The government is asked to pay attention to the economy

What matters today is the financial condition of our families. At least this is the view of our fellow citizens, who on the day subsequent to the general election in one of our polls indicated the containment of prices of utility bills and consumer goods as a top priority for the newly elected government.

In a context plagued by an economic crisis, our attention now turns to financial security

In this sense, two measures that have been at the centre of public debate in recent years are emblematic: the basic income and the Super bonus. In both cases, we are talking about highly divisive measures that have clearly split public opinion.

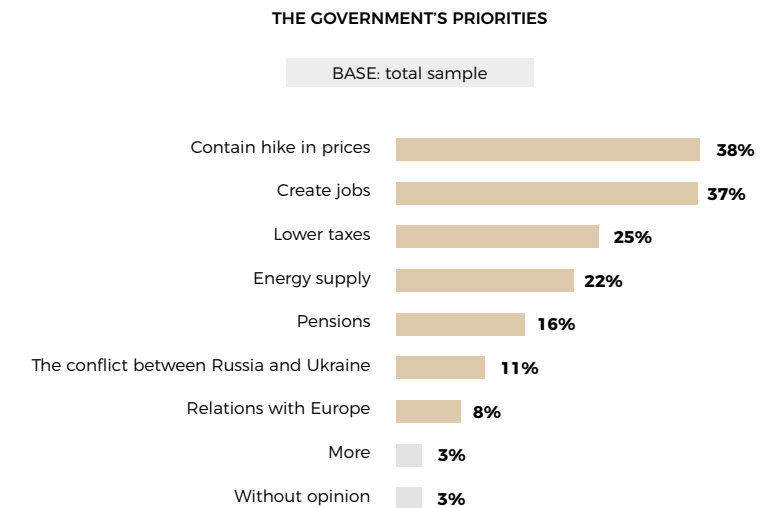
The majority of Italians believe that the basic income is somewhat expendable, not decisive for the country's growth. However, it is also true that in some areas, particularly in the South, this measure is per-



ceived as very important for the survival of families.

The opinion on the Super bonus is sharper: the majority of our fellow citizens think it can be cancelled, but almost one in three feels that they have not been given the necessary tools to take a stand. In short, the feeling is that, having put aside

the concern about security in the sense of public order, there is now a great demand for economic security, for instruments that make us look to the future with optimism despite inflation. This is probably the most important challenge facing the government. ■



THE STUBBORN PURSUIT OF MONETARY POLICY

Lucio Poma

Chief Economist, Nomisma

In an increasingly uncertain environment on the financial markets, do central banks still matter, as in the past? Or is it time to conjure up new economic intervention policies?

W

We are deep into an unprecedented economic environment that has no parallel in the past. Uncertainty and volatility connect once distinct variables that were read and interpreted separately. Today, a political, health or military event in a distant country has immediate and direct effects on the productive organisation of small local contexts, undermining the competitiveness of companies.

Almost all these variables are beyond the control of economic governance. In a world out of control, governments are left with few levers to direct economic dynamics, and being rare, they are much more important than in the past. Monetary policy is one of them. Its importance goes beyond *simply* controlling the cost of money. It becomes a benchmark for expectations, a signalling buoy



Lucio Poma, Chief Economist, Nomisma

in an increasingly rough and unpredictable open sea. That is why it must be operated and dosed with the utmost caution, in an economic environment radically transformed from the past. This has not happened.

The emergence of inflation

It all started in 2021. Rising gas prices spilled over to coal and oil and then to other commodities: aluminium, paper, plastic, glass, causing inflation to soar. The **Fed**, taken aback by rising prices, moved decisively to raise rates by 75 basis points for four sessions in a row, quickly bringing the rate to 4% (today it stands at 4.75%). But something went amiss.

First of all, monetary policy as such did not work. The core inflation component, the one that should be slowed down by monetary policy, did not fall, unaware

of the explosive rise in interest rates. The February Fed minutes state that since inflation is higher than expected, monetary policy will continue to be tightened. In other words, since monetary policy is not working, I feel. Moreover, the central bank did not properly take into account that the economic system was coming from years of zero interest rates, accompanied by a quantitative easing of 120 billion dollars monthly. An economic system that, given the beguiling rate conditions, was heavily in debt, only to suddenly find itself in a completely reversed situation within a few months.

New tools wanted

The Fed did not give the system time to readjust, to rebalance its securities portfolios. As the **SBK** fiasco taught us, those who had been exposed to it found themselves with government bonds stripped of their value by the inc-



In a world out of control, governments are left with few levers to direct economic dynamics

sant new issuances at rising rates. What will happen at the next Fed meeting? Expectations were leaning towards a 50-point increase. Subsequent to the SBK downfall,

bets were on a more cautious attitude: a zero increase, at most 25 points. However, the **ECB's** move to raise rates by 50 points could be a game changer. The euro/dollar exchange rate comes into play, which is very important for the US burdened with a historically deficit trade balance. Therefore, resilient inflation and potential weakening of the dollar point

towards a 50-point increase. Weakness in the financial system and the risk of a contagion effect of negative expectations are tilting towards a zero session. A difficult balance that is likely to lead to a 25-point increase, which in fact does not address the crucial issues: it simply stalls, spreading further uncertainty.

One question remains open: do monetary policies still work as they did in the past, or is it time to think about new instruments of economic intervention? ■



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THE WEAKNESSES OF OUR PENSIONS (AND WELFARE)

Alberto Brambilla

President, *Itinerari Previdenziali* - Study and Research Centre

A new academic research counters the widespread assumption that it is good to start setting aside capital as early as possible ahead of leaving the world of jobs: the findings say the ideal age would be around 35

Italy is among the top five countries in the world for the degree of social protection offered to its population and in third place for the ratio of social spending to GDP. It is, however, also a country in which seven out of 16 million pensioners are partially or fully assisted, while the bulk of the tax burden, and thus also of the financing of the *welfare state*, rests on the shoulders of a scant 13% of taxpayers (those with incomes of

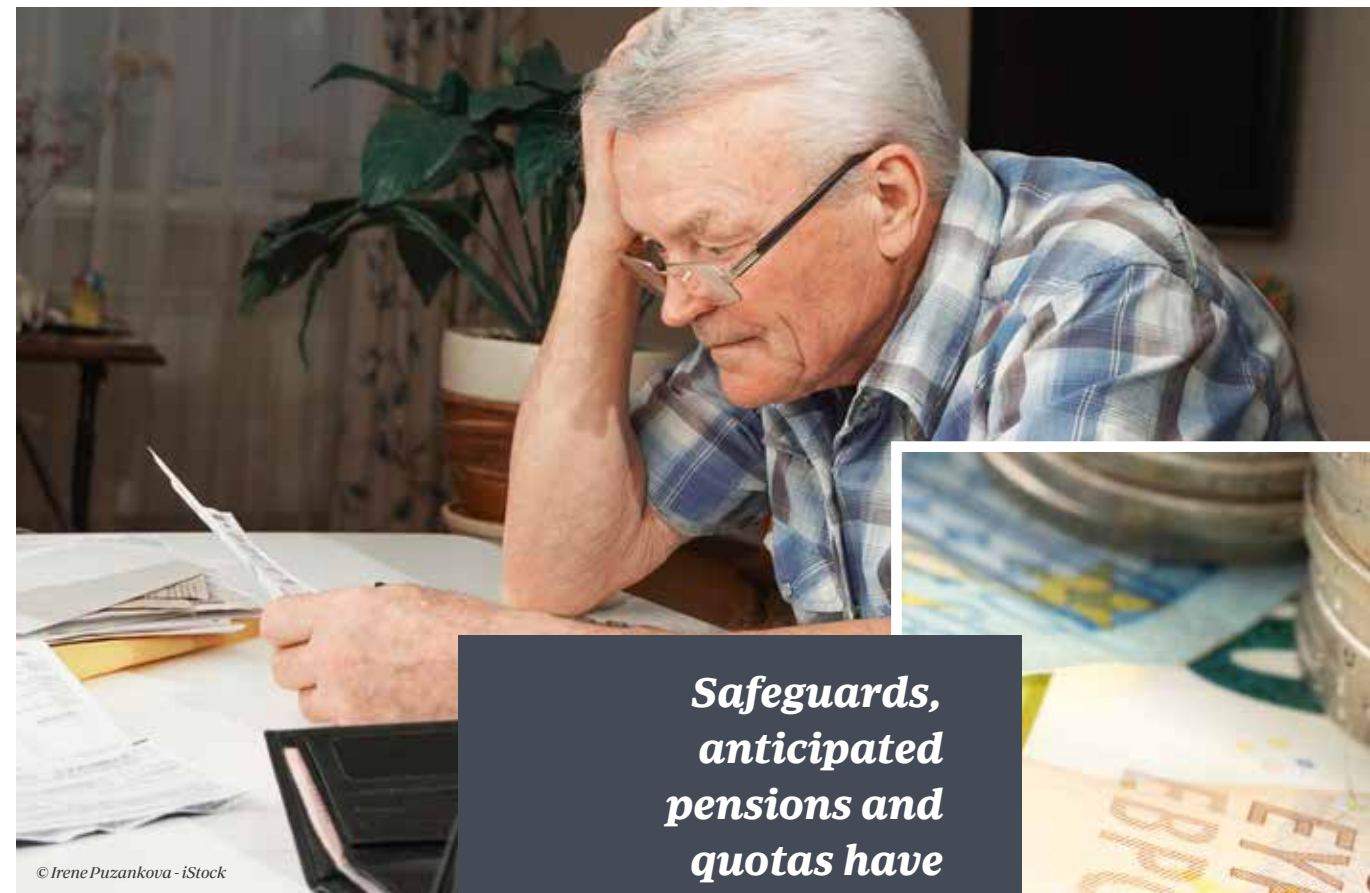
35,000 euro and above) who alone account for almost 60% of Irpef Income Tax. All of this, in an ageing society, driven by politics in search of easy consensus, continues to claim subsidies, bonuses or concessions.

These few data are enough to disprove the common belief that Italy spends little on welfare, and understand how the sustainability of the system cannot be separated from that of the Italian system, itself con-



Alberto Brambilla, President, Itinerari Previdenziali - Study and Research Centre

ditioned by public debt and wealth produced. If the public debt/GDP ratio, which, despite the devaluation produced by inflation, is expected to reach 145% in 2023 (the 2022 EU average is 94%) is therefore a first problem, the second critical element concerns our ratio of active workers to pensioners. In 2021, the last available survey year, Italy had 1.4215 active workers paying contributions for every pensioner: still a long way from the 1.5 that would represent the minimum threshold necessary for the medium to long term stability of a pay-as-you-go system. And if on the one hand, assuming that the effects of the war in Ukraine on raw materials and energy can be kept under control, there is a need for employment incentives and industrial policies that also know how to capitalise on the resources of the National Recovery Plan (NRP), on the other hand it is fundamental to keep the (too many) early retirement mechanisms under control.



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Safeguards, anticipated pensions and quotas have sown a veritable welfare jungle

Going beyond welfare measures

Herein lies the third weakness, in the race between parties and trade unions to reduce the retirement age: 64.3 years is the actual age as of 2021 if we include all seniority, old age and early retirement pensions. Between safeguards, anticipated pensions, quotas, and so on, everything has been invented, removing certain rules from the system in favour of an authentic jungle, which has favoured some categories without contributing to the structural flexibility needed subsequent to the Monti-Fornero reform.

Low employment figures, an increase in the number of pensioners and excessive de-contributions have generated a deficit between income and expenditure to the tune of 30 billion: the recovery will be borne by the state and by the few who pay taxes. In spite of the headlines celebrating record employment, there is one last issue that should not be overlooked: Italy continues to be, in terms of overall employment rate (60%), at the bottom of the list in Europe, where even Greece does better with 60.6% (69.9% the EU average). It is not work

that is lacking, but rather adequate policies and instruments to facilitate the matching of supply and demand, which are too often neglected in favour of welfare measures that end up aggravating an already monstrous public debt, to the detriment of the younger generations. ■

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The revival of Italian entrepreneurship

Maria Rosa Alaggio

Simplifying relations with public offices and revising taxation for artisans and small businesses. Also enhancing the sturdy sectors of our traditional manufacturing and focusing on technical and practical skills. Marco Granelli, President, Confartigianato, believes in incisive legislative interventions to reduce the burden of bureaucracy and taxation that afflicts 98% of Italian businesses

conomic, productive and social heritage are divided into four macro areas: economic policies, trade union and labour policies, tax policies and organisation, promotion and marketing.

The President of Confartigianato, commencing 2020, has been **Marco Granelli**, born in Salsomaggiore (Parma) in 1962, owner of a company in the construction

sector, president of Confartigianato Imprese Parma, the city's business association, for many years, head of Confartigianato Emilia Romagna since 2009 and then appointed deputy vice president of Confartigianato in 2012. Today, Granelli's role as President sees him involved in a political debate with the government on strategic issues for the resilience of Italian craftsmanship, first and foremost the importance of the NRP as a tool to foster modernisation and competitiveness, provided that we know how to involve all the players

Know-how and 'savoir-faire' is the expression that best defines 'Made in Italy', the craftsmanship and entrepreneurial spirit that stands out worldwide, with its ability to valorise ancient crafts, combining them with innovation and cutting-edge technologies. Reinventing the Italian manufacturing tradition means confirming excellence in the food sector, fashion, construction, mechanics, transport and much more, right up to areas such as art and communication.

Since 1946, the year it was founded, **Confartigianato** (Artisans Guild) has accompanied entrepreneurs, giving rise over time to a structure that today boasts 103 territorial associations, 21 regional federations, dozens of sectors organised into seven business areas, 12 category federations, 46 trade associations. Throughout Italy, 1201 Confartigianato offices employ 10,700 people working for one and a half million entrepreneurs with three million employees. The activities to represent this eco-



Marco Granelli, President of Confartigianato

Tax reform must take an uniform view of income, regardless of the legal nature of the parties involved



in the production fabric, monitor investments, and support local public administrations, taking into account the strong link between small towns and enterprises. But there are many fronts on which to act to support artisans and their businesses, which represent 98% of Italian companies: the weight of bureaucracy and taxation, many legislative measures that penalise entire sectors, including construction, the high cost of energy and energy efficiency, the push for internationalisation, the search for better labour policies, the involvement of new generations, and the inclusion of women.

the public administration, the standardisation of procedures, and the interaction of public databases. “The simplification package announced by Public Administration Minister Paolo Zangrillo,” says Granelli, “gives us hope for the simplicity of starting up and running a business and for more streamlined and direct communication between entrepreneurs and government offices. Also on the tax reform front, Confartigianato appreciates the general outline announced by the government, which

appears to be going in the right direction for an organic and structural revision of the tax system, capable of precisely combining the requests submitted long ago by the association. The hope is to foster a friendly relationship with the taxpayer, fairness of behaviour without criminalisation, and the possibility of cross-examination before any penalty is issued. “The reform,” Granelli points out, “must be an opportunity to review the taxation of business income, ho-

Smooth procedures and reform of the tax system

The starting point in the discussion with the legislator is the need to finally succeed in tackling malaburocracy, a sick system. In order to simplify the lives of entrepreneurs, incisive actions are needed to promote the digitalisation of communications between companies and

CONFARTIGIANATO

(General Federation of Italian Artisans and Craftsmen)



7 business areas



12 trade federations



103 territorial organisations



46 trade organisations



21 regional federations

mogenising the treatment of income regardless of the legal nature of the subjects. In addition, an equal exemption area for all taxpayers must be envisaged within Irpef, and micro-taxes must be overcome and the system simplified, also through the gradual elimination of Irap, the tax on manufacturing activities”.

Energy: no harassment for citizens and businesses

For a long time, representatives of small enterprises have complained about the imbalance in the imposition of taxes and general charges on the bills of Italian entrepreneurs. This is why they advocate a reform that would eliminate the unequal treatment of large and small businesses by reducing the taxation on energy consumption for smaller companies.

The mechanism based on the concept of *the less you consume, the more you pay* applied to parafiscal charges, according to Granelli, forces micro and small enterprises with low energy consumption to bear the largest share of the burden for the support of renewable energy. This distribution swells the final cost of energy for small companies by 35 per cent, paying four times more for electricity than their larger brothers.

‘It is essential to eliminate absurd inequalities such as the energy taxation system,’ Gianelli points out, ‘which today touches 51 per cent of the bill and penalises small businesses forced to pay the most, among other things, to financing subsidies for energy-intensive companies.

With regard to energy efficiency of the building stock, the construction



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sector, as is well known, is directly affected by the European Green Homes Directive: a great opportunity for the country and for businesses, provided that the system of incentives in the building sector is thoroughly rethought.

‘Enough with spot interventions subject to constant rethinking,’ Granelli warns. The energy efficiency of buildings can be a great opportunity for the country and for our companies, but it must not turn into harassment for citizens and businesses. Europe must commit itself to supporting investments to achieve the green transition of the residential heritage’. The really effective way forward is to design a real long-term structural strategy that punctuates the deployment of additional public resources. “In this way,” Granelli continues, “we will be able to achieve a positive return in terms of GDP growth and steer citizens’ choices

towards the quality and energy efficiency of housing.

Looking for skilled labour

Against the backdrop of the problems related to the weight of bureaucracy and taxation, there is also the issue of the workforce. Between demographic changes and training policies that for years have privileged ‘knowledge’ over ‘know-how’, finding adequate resources for artisanal enterprises is a major challenge for the future. It goes without saying that in 2022, small enterprises had a tough time finding a whopping 1,406,440 workers, or 42.7 per cent of expected recruitment.

As per data analysis from the **Unioncamere-Anpal Excelsior** system, in the handicraft sector, the share of hard-to-find entries rises to 50.2%, equal to 263,980 hard-to-find workers, a share 10.8 points higher than

that of non-artisanal enterprises (39.4%). Concerning the origins of these difficulties, 27.8% were due to the low number of candidates, 17.8% their unsuitability, and 4.7% owing to other reasons.

‘The training of young people,’ Granelli emphasises, ‘is an aspect on which the country’s future is at stake, and it is among the issues that are closest to Confartigianato’s heart. Unfortunately, the culture of work is not taught in Italy. We come from decades of misguided educational policies that have imposed an educational model that pits knowledge against know-how. On the top rung stands, academic culture and theoretical knowledge, on the lower rung, technical and practical skills. Result: the new generations do not find jobs and companies do not find skilled labour’. This is why we need a new, inclusive training model ‘with artisanal value’ that enables the training of complex skills combining humanistic and technical culture.

According to Granelli, it is necessary to focus on professional apprenticeship as a fundamental incentivised channel for entering the jobs market. It is also necessary to support

Over 220,000 artisanal enterprises are active in the circular economy covering repair, maintenance, re-utilisation and recovery of products and materials

and relaunch vocational courses of study both from a systemic perspective, by structuring orientation paths throughout the training pathway, ‘and from a supply chain perspective that provides greater incentives for dual and vocational training and enhances the tertiary level with ITS’.

The Made in Italy flag in the world

Amidst the adverse economic, political and social scenarios afflicting the business world globally, Italian micro and small enterprises, as far as their presence in foreign markets is concerned, continue to hold the Made in Italy flag high in the world. The exports, between July 2021 and July 2022, stand at EUR 141.2 billion. In particular, driving the entrepreneurs’ foreign sales are the food, fashion, furniture, wood, metals, jewellery and eyewear. In the first seven months of 2022, these sectors show a positive trend of 5% in ex-

SPACE FOR YOUNG PEOPLE AND FEMALE ENTREPRENEURS

There are 535,000 artisan entrepreneurs under 40 who are working to build the future of small business in Italy through actions that combine education, training, information and the labour market. For the **Young Entrepreneurs** of Confartigianato, a movement active throughout Italy chaired by **Davide Peli**, it is essential to collaborate with schools and involve young people, teachers, families and companies. Particular attention is also paid to opportunities thanks to technological evolution and the possible positioning that new generations will be able to gain through innovation. In addition to enhancing the skills of young people and creating new opportunities for their future, Confartigianato aims at the development of female entrepreneurship. Since 1994, the **Donne Impresa** movement, chaired by **Daniela Biolatto**, has been active at the national level, with the goal of airing the needs and potential of 361,000 businesses. Donne Impresa aims to promote female representation in decision-making bodies and build a welfare system that supports women in a path of professional growth through which they can contribute to the country’s prosperity.

need to be speeded up, there is also a need for certainty in the timeframe between the publication of notices, the allocation of the incentive and the actual disbursement. We expect the ICE Agency to develop innovative formats, calibrated to micro and small enterprises, in order to respond to market changes in a streamlined manner’.

A commitment for supporting companies

For a real relaunch of the economy, as stated by Confartigianato, businesses in all sectors need easy access to new business finance instruments, research and projects for digital and technological innovation, ecological transition and internationalisation. This means that it is also essential to take action to strengthen the tools to encourage the creation and transfer of businesses, to simplify the time and methods for accessing incentives, and to strengthen the financial instruments needed by entrepreneurs to reinforce their activities.

‘We need dedicated interventions in the most innovative sectors,’ Granelli signs off, ‘but we also need projects to enhance the strong sectors of our traditional manufacturing. In order to defend and promote our products, we also need a decisive commitment against counterfeiting, especially in the fashion and agri-food sectors, focusing on the traceability of production stages, the recognition of geographical indications for non-food products, and the strengthening of quality assurance tools such as trademarks and patents and accredited certifications’.

ports, far above the +0.9% average for national exports.

The circular economy and the green transition are trends that already involve many companies in our country. Over 220,000 of our artisanal enterprises are active in the circular economy between repair, maintenance, reutilisation and recovery of products and materials. Fashion and furniture companies are particularly keen on upcycling, i.e. the creation of

new products from waste materials.

Among the open issues in the debate between business and government is the establishment of a steering committee to support the internationalisation of Italian companies.

‘It is important for us to be able to count on a multi-year programme with adequate resources to accompany companies on international markets,’ Granelli specifies. ‘In this regard, bureaucratic procedures



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THE CRIMINALS OF THE METAVERSE

Giacomo Corvi

Sexual assault, financial fraud, money laundering and even terrorism: journey into the darker side of the new virtual reality. Law enforcement agencies have been adopting countermeasures, but the risk is already here

'Criminals have proven to be so sophisticated and professional that they are quick to exploit any available technological tool to commit new crimes,' commented **Jürgen Stock**, Secretary General of Interpol, in a recent interview with the *BBC*. 'We know that if we respond too late, there will be less confidence in the tools we are using and therefore also in the metaverse' he added.

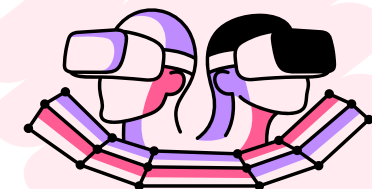
Risks to public safety

Interpol's announcement came at the same time as the publication of the first edition of the *Global Crime Trend Report*, a survey conducted by the international body to detect the main risks to public safety in the present and the near future. Well, according to the results of the report, *cybercrime*, together with financial crime, is at the top of the list: ransomware, phishing and intrusions into digital devices, in detail, are the crimes that generate the most concern.

Interpol's fear is quite evident: if criminals have been so good at exploiting digital channels, how long will it take them to commit their crimes in the metaverse? As a matter of fact, they are already doing so. Last October, **Europol's Innovation Lab** published a report on the activities that criminal groups can carry out in the metaverse. In the report, there is a bit of everything: from disinformation to identity theft, from

Interpol has made its own metaverse. Last October, at its general assembly in New Delhi, the international police body lifted the curtain on what an official press note describes as 'the first metaverse specifically designed for law enforcement agencies around the world'. The virtual space offers a digital representation of Interpol's headquarters in Lyon, France, and allows participants to interact with the avatars of their colleagues and take immersive training courses on new forensic investigation techniques. It also al-

lows them to have an ideal representation of what the metaverse could be and, above all, to develop models and strategies to fight crime in the metaverse. Yes, because even crimes and misdemeanours seem to have made their way into a virtual space that will apparently not only be dedicated to education, tourism and entertainment.



data retrieval to financial fraud, and even techniques and strategies, such as the human joystick attack, that can have serious (sometimes even fatal) repercussions in our real lives. “I believe it is important for the police to anticipate the changing realities in which they have to provide security and protection,” commented Executive Director **Catherine De Bolle**.

Virtual harassment, real trauma

One of the most controversial (and unfortunately widespread) crimes

in the metaverse is harassment. Cases of virtual abuse and groping have been reported since the dawn of the metaverse. At the end of 2021, for instance, gamer **Chanelle Siggins** reported being sexually assaulted while playing the video game *Population One*. At the same time, psychotherapist **Nina Jane Patel** denounced what she described in a blog as ‘a virtual gang rape on my avatar’. Then a report last May by the non-profit organisation **Sum-OfUs** caused quite a stir. The report cited the case of a researcher who, as a 21-year-old black girl, was led into a

private room during a party on *Horizon Worlds*, **Meta’s** metaverse, and there ‘sexually assaulted while a second user watched’. The experience was described as ‘disconcerting’. The same report goes on to relate the case of a user who was persuaded to deactivate the *personal boundary* function, a device that does not allow strangers to get too close to an avatar. “She immediately noticed,” the report reads, “that her controller vibrated when another user touched her, creating a disorienting and even disturbing physical experience during a virtual assault.”



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Digital money laundering machines

The metaverse has also proven to offer an ideal room for money laundering: fast and anonymous transactions, perhaps through the use of *Nft* and *bitcoin*, can enable criminal organisations to launder money safely and away from the law enforcement spotlight. Last March, for instance, the **FBI** stated that it had disrupted a million-dollar scheme based on

the sale of *Nft* in the metaverse. The techniques used on virtual platforms very often replicate those used in reality. After all, the metaverse is populated by virtual companies offering goods and services. And, just as in reality, they can be exploited (more or less consciously) to launder money from illicit activities. **Bion Behdin**, co-founder of **First Aml**, a company specialising in anti-money laundering, recently told *The Sun* that even simple video games, such as *World*

of Warcraft or *Roblox*, can be used to move money into international accounts. It is enough, “to convert money collected from illegal activities or stolen credit cards into the game’s virtual currency”. Criminals can use multiple fake accounts or hack existing ones

‘to avoid controls’. And finally ‘withdraw, move and convert currency into operations that can return clean money’.

A virtual caliphate

Finally, the use that may be made of the metaverse for terrorist purposes is of great concern. The **Isis** experience has shown that such groups have all the capabilities to exploit digital channels for proselytising, training and organising attacks. The same thing could then be duplicated in immersive mode in the metaverse.

The alarm was raised last June by the European Union’s counter-terrorism agency in a report published in *EuObserver*. The report explicitly

mentions the risk of a ‘digital caliphate’. Terrorists would first of all benefit from new tools for fundraising and money laundering. They could exploit the emotional involvement of an immersive experience to recruit new followers. And they could even re-enact beheadings or even major terrorist attacks, such as those that struck Paris in 2015, for propaganda purposes. ■

“An ideal place to launder money: fast and anonymous transactions allow criminals to bypass law enforcement agencies”

Climate change, the science of the possible

Climate change must become part and parcel of decision making: it is imperative that institutions and individuals become aware of the effects in their adaptation plans. The good news is that today we already have all the tools and technologies available, but it is crucial that mitigation policies are simultaneously implemented

Fabrizio Aurilia

Last Friday, 3 March, *Fridays for Future*, the movement born on the impetus of Swedish activist **Greta Thunberg**, had launched its new global climate strike day, following in the wake of those organised in 2018 and 2019. Those events had brought Thunberg onto the world stage by shaking up the global debate on climate change, subsequent to the (theoretical) turning point of Cop21, the Paris climate conference, in 2015. Activists, especially from high school, university and young adults, have multiplied their demonstration actions in recent years (from sym-

bolic assaults with washable paint to the smearing of artworks in museums) as the environmental crisis has worsened. Nonetheless, various environmental groups are finding it harder to mobilise the masses and find a strategy that allows them to be more effective, in a context where traditional demonstrations have gradually waned.

It is hard to say what this trend implies, all the more so since climate change, sustainability, and global warming are being talked about more and more, and the political, intellectual, and productive elites -

CLIMATE CHANGE

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albeit with a thousand distinctions and ambiguities - are looking for tangible solutions, starting with international agreements, and arriving at regulations capable of really changing things.

The national plan, at last

At the European level, the climate issue is at the centre of the political agenda: as is well known, the Green Deal, one of the most important acts passed by the EU institutions, which envisages the achievement of carbon neutrality by 2050, puts the European Union at the forefront of the fight against climate change.

At the local level, in Italy, an important step has been taken with the *National Plan for Adaptation to Climate Change*, a planning tool necessary for the management of the territory and the implementation of adaptation works in the various areas of the country, from cities to the countryside, from the mountains to inland areas, and to the coasts. The plan provides a framework for minimising the risks of climate change, especially in relation to extreme events, which were once rare, but have now become commonplace.

The answer is adaptation

'Some of the measures featured in the plan, however, already need to be revised in light of the changes over recent years,' explains **Marina Baldi**, climatologist at the **CNR Institute for Bioeconomy**. "If we think about the sea level, each region will have to adjust the plan according to its own needs and, what's more, we now know a lot more about the subject

At the European level, the climate issue is at the forefront of the political agenda



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THE LONG INCUBATION

The declination of the National Climate Change Adaptation Plan on a local scale presents some excellences. Marina Baldi, climatologist at the CNR Institute for Bioeconomics, cites, for example, the Adaptation Plan of Emilia Romagna and specifically Bologna, which she calls 'cutting edge'. Many metropolitan areas, such as Rome, are moving in that direction. "Like the pandemic, the climate emergency was an invisible problem, with a long incubation, but today we know much more, we know how to respond, we know the solutions: a lot of work has been done at all levels, from the global down to the local," Baldi emphasises.

than we did five or ten years ago. For example, some areas have been reported to be more at risk than others: from the Venice lagoon to the Gulf of Cagliari or Oristano, to lower Lazio, or even some coastal regions in the Adriatic. Based on the information in our possession, 'we have several situations that now require a specific adaptation plan. The plan naturally looks at a bit of everything, from the maintenance of cultural heritage, monuments, archaeological sites, but also forests and biodiversity.

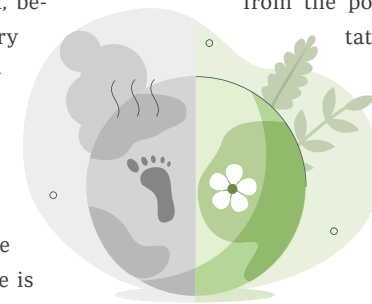
Local variables

One of the main actors in this ecosystem is the **Euro-Mediterranean Centre on Climate Change (CMCC)**. **Paola Mercogliano**, head of the CMCC's regional models and geo-hydrological impacts research division, explains its importance in the study of global warming, and consequently of mitigation measures, to be able to

DECISIONS NOT HANDED DOWN FROM ABOVE

The Euro-Mediterranean Centre on Climate Change, once the local criticalities have been analysed, suggests to policy makers and private partners, companies and responsible bodies, the measures (hard or soft) to limit the impact of climate change on that specific community. 'Adaptation, however,' explains Paola Mercogliano, head of Cmcc's regional models and geo-hydrological impacts research division, 'cannot be parachuted from above, it must be agreed with those who live in the local context: different tools have different costs and different social acceptances'. When it comes to physically moving people, because they are in danger at that particular point, the last word is up to those who decide on those territories who have, however, had all the information provided by the scientific community.

act at a local level, because each territory has its own characteristics and is exposed to different risks in different ways. In the Mediterranean area, the rise in temperature is the main threat. In Italy,



from the point of view of adaptation there are all the tools and technologies. A predicted *global warming* between one degree and one and a half degrees can be managed, but if we are talking about three

the phenomenon will impact not only people's health, but also three main sectors: agriculture, infrastructure and tourism. "However when one declines the analysis at the local level, at the level of communities, criticalities may emerge that are not necessarily those mentioned".

Reality worked well

It is imperative to have knowledge of the effects of climate change in one's decision-making plans, and

or four degrees, Mercogliano points out, 'then there is a limit to adaptation, which is why it is essential that mitigation policies are implemented at the same time.

Climate change is an element that must enter into decision support. "The reality," concludes the head of Cmcc, "has worked very well: people are demanding concrete solutions and this gives me confidence about the response to the needs of society, and of everyone."



The link with fossil fuels

Niccolò Pescali

That the earth is a sick patient is now common knowledge. With different approaches to the issue, most governments are agreeing on the need for urgent action. But when the real data is collected, it turns out that most countries still seek, use and invest in non-renewable energy sources

The pivotal goal contained in the Paris Agreement is to limit global warming to below one and a half degrees. This will have brought together the majority of the world's governments, especially those of the developed economies, the culprits of the climate catastrophe. However, from intention to action, it's a long and winding road. Since the agreements, signed in 2015, the G20 countries have never decreased their funding for fossil fuels; on the contrary, according to a joint **OECD and International energy agency analysis**, total support for oil and the like in the world's 51 largest economies, which account for around 85% of the world's total energy supply, has risen from \$362.4 billion in 2020 to \$697.2 billion in 2021. In stark contrast to the good intentions on climate, government subsidies to fossil fuels rose to one trillion dollars in 2022, twice as much as in 2021 (source: IEA), and the world's major banks, JP Morgan above all, continue to finance oil companies to the tune of \$748 billion, with no decline in recent years (*Fossil Fuel Finance Report 2022*). A trend that continues to grow if we

COAL GIANTS

If gas is seen as a lesser evil (still remaining a fossil fuel) and this, in part, explains the explosion in its cost and its continued research, there is no doubt about which energy source is the most polluting of all: coal. It alone is responsible for 44% of the world's CO2 emissions (source IEA). It may seem like a fuel from another age, but in Italy subsequent to the post-Ukraine energy shock, the five power stations that are still active are back to full capacity; Germany has reactivated mines and power stations, and in the European Union as much as 6% of the energy produced still comes from coal. Tiny numbers when compared to the two Asian giants. In particular, China alone consumes half of the world's coal, while India is second with 11.3 per cent, but with an ever-increasing trend that traces its very long industrial development. The dragon state's energy consumption is 57% from coal, which contributes 66% of electricity production. In general, consumption of the most polluting of fossil fuels, which according to the IEA peaked in 2022, will have to be reduced by 90% by 2050 to meet the roadmap that would limit the global temperature increase to around 1.5 degrees. An ambitious target in stark contrast to what is happening, considering that 14 new coal-fired power stations were inaugurated in China in 2022 alone.

The G20 countries have not decreased funding for fossil fuels post signing of the 2015 agreements

consider that the **International Monetary Fund** estimates that spending on fossil fuels in 2025 will reach 7.4% of global GDP, also an increase compared to past years.

Between intentions and actions

According to the *Intergovernmental Panel on Climate Change (IPCC)*, not only will the ambitious target of +1.5 degrees not be met at this rate, but the two-degree ceiling will also be exceeded by a wide margin, reaching 2.7 degrees by the end of



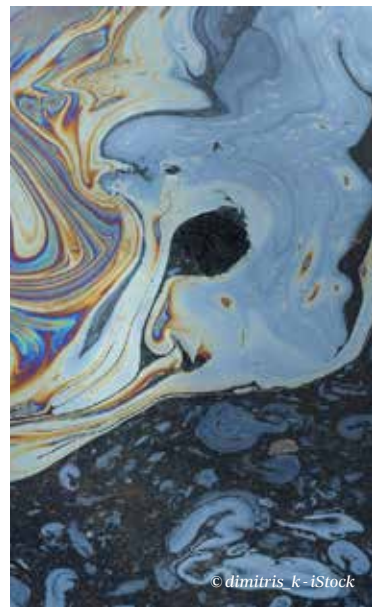
the century, with unknown consequences for the planet. The problem then intensifies if all the countries of the world, differing greatly in their degree of development and energy needs, have to sing in the same choir. Emblematic is the example of India, a demographic giant in full expansion, the third largest emitter of greenhouse gases in the world, which during the Cop26 in Glasgow presented a last-minute amendment to its ambitious plan to achieving zero emissions by 2070: the word *elimination* is replaced with *decrease*. A significant detail, which shows that the renunciation of fossil fuels, especially for developing countries, is still an unviable option. A **McKinsey** study estimates that to achieve climate neutrality, annual

global expenditure will have to increase by \$3.5 trillion. Who must bear the burden?

Who pays for the transition?

A transformation, the one towards *NetZero*, carries not only economic but also cultural and social costs. The ecological transition is a political choice, which requires considerable effort, especially from developing countries. It is even more difficult for a growing country to change its mode of production, given less financial resources and an increasing demand for energy. Not only that, but the world's poor countries are also those most affected by the disastrous consequences of

the climate crisis: from Pakistan scourged by floods that have caused damage amounting to around 5% of the national GDP, to the small archipelago of Tuvalu that is close to sinking under the ocean due to rising sea levels, to the populous Sahel where 135 million people are running out of water reserves. Developing countries, led by India, are demanding 340 billion a year from developed countries as compensation for climate damage and as a transition subsidy, ten times what is given now. A rift between developed and undeveloped countries makes the issue even more intricate and burning.



Europe and Italy at full throttle

Italy, Europe and the entire developed world have proposed, in international contexts, to lead by example on how to make the ecological transition possible. Actually, this is not the case. In January, on a tour of North Africa, Prime Minister Giorgia Meloni visited Algeria and Libya to strengthen energy relations with the two countries. Thanks to agreements signed by Eni and Sonatrach, Algerian flows are set to double from nine to 18 billion cubic metres per year by 2024, replacing Russian gas on which Italy was 40% dependent prior to the invasion of Ukraine. What happened in Libya is similar. The Italian government, in close association with the oil company ENI and its Libyan counterpart (National Oil Corporation), has planned the development of new offshore facilities that will reach a plateau of 750 million cubic feet of gas per day in 2026, all with an investment of eight billion dollars.

A little over a hundred kilometres further east, in the eastern Mediterranean, several natural gas fields have been discovered, including

The world's poor countries are hardest hit by the consequences of the climate crisis

Zohr, the largest ever in the Mediterranean. The *US Geological Survey* estimates that gas reserves totalling 286.2 trillion cubic feet lie under the Levant Sea. The European Union and Italy are looking with interest at the EastMed project, a submarine gas pipeline of about 2000 kilometres that would connect these deposits with Europe, costing six billion. Hence the birth of the *East Mediterranean Gas Forum*, first announced in 2018 and formed in 2019, a sort of Mediterranean gas OPEC. Hardly a move to chart a course towards a renewable energy future. ■



Climate, understand and act

Giacomo Corvi

Catastrophism does not help the fight against climate change. “Let’s understand, the risks are there and must be addressed,” **Giorgio Vacchiano**, an expert in forest management and planning, clarifies. “However, I fear that communication focused only on the consequences of climate change,” he adds, “can generate mistrust and instil a sense of impotence in the public, distracting them from taking certain steps that could instead have concrete effects in the fight against climate change.”

Thanks to Giorgio Vacchiano, named in 2018 by *Nature magazine* as one of 11 emerging scientists *making*

A less catastrophic approach, more careful dissemination of solutions and benefits for the population: two experts in the field deem it necessary to bring people closer together and convey the opinion that much can still be done to contain the effects of climate change



their mark in science, the truth is that ‘we can still do a lot to contain the effects of climate change’.

What is needed, according to **Stefano Caserini**, an environmental engineer and head of the course in Climate Change Mitigation at the **Milan Polytechnic**, is ‘a different approach, even in the popularisation of science on climate change: we must succeed in attracting the public and conveying a perspective of trust, without going overboard with desperate visions that can lead to paralysis’.

SEX AND CLIMATE

How would a climate change sceptic react to the prospect that rising global temperatures might adversely affect his fertility or limit his sexual sphere? Probably not with the trademark shrug of the shoulders that often accompanies considerations of risks to biodiversity or to the resilience of the ice caps. This is the scenario envisaged in a booklet released last year by **People Publishing** and aptly titled *Sex and the Climate*. *What nobody has yet explained to you about climate change*. The text was recently transposed into a play. “It all started out a bit for fun, to find a pop and catchy way to bring the general public closer to the subject of climate change,” notes author Stefano Caserini. The book, wedged between a *WankBand*, an *Ecosex* movement and even techniques for approaching climate change, offers a different and unusual take on the subject of the rise in temperatures, while also providing some useful tips for reducing one’s carbon footprint. “The feedback we have had so far is very positive,” Caserini signs off.

A different approach is called for to attract the public and convey a feeling of trust

Benefits for the population

According to Vacchiano, 'the time has come to talk about solutions and the benefits that people will gain from combating climate change: less pollution, but also more job opportunities and economic savings'. Vacchiano, in this regard, cites a recent article from the *Economist*, according to which Texas farmers are moving into renewable energy because it is proving cheaper than traditional fossil fuels. 'If even Texas, land of gas and oil, is embracing wind turbines and solar panels, then there really is hope for everyone,' Vacchiano jokes. Other interventions could then

concern, for example, forest and woodland areas, with measures, illustrates the expert, that 'could safeguard the biodiversity of these ecosystems, make them more resistant and less vulnerable to phenomena that are also dangerous to humans, such as fires and windstorms'. Providing firebreaks and eliminating flammable vegetation, in this context, could 'limit the pervasiveness that forest fires have reached in recent years'.



It is time to talk about solutions and benefits: less pollution, job opportunities and economic savings



trends, climate change could lead to a disintegration of the ice caps in a few centuries, and a consequent rise in sea level of a score of metres'.

A system approach

However, individual citizens' efforts will not be enough to avoid such a scenario. "The individual effort to reduce one's carbon footprint is certainly commendable, but much more will be needed to solve the climate change issue: political will, supranational agreements and legislative measures appropriate to the scale of the threat we are facing, as well as programmes that take into account the fact that the climate has already changed," Caserini notes.

Here too, however, science can do a lot. After all, says Vacchiano, 'it is the citizens who determine the direction of public policy with their votes'. And news such as a recent study published in the *Lancet*, according to which achieving 30 per cent tree cover in Europe's big cities could reduce deaths caused by increasingly frequent heat waves, "are useful to make people aware how the fight against climate change can provide immediate benefits for us all," says Vacchiano. "All the parties that stood in the recent elections in Italy had at least one item dedicated to climate change, a very good signal" he concludes. ■



Urgent and necessary interventions

Much more could be done to contain the impact of climate change. In the hydrogeological field, for example, the most obvious effect of rising temperatures is drought and no rainfall. 'This is a scenario that now also affects Italy and is causing extensive damage to crops in the Po Valley,' Caserini adds.

What do we do in the face of such a scenario? Caserini identifies a dual course of action. On the one hand,

he explains, 'adaptation measures to events that are already underway and inevitable for the future are called for, such as, for example, in agriculture, the replacement of crops such as maize and rice, which are very demanding in terms of water, with crops that require less water'. At the same time, he continues, 'mitigation actions that drastically reduce climate-altering gas emissions will be necessary to contain the rise in temperatures, otherwise the impacts will be unmanageable: for example, it is likely that, at current

Our impact on the Earth is a Dantesque circle

A bestseller in France, 'World Without End', by Christophe Blain and Jean-Marc Jancovici, is a fundamental book for understanding the emergence of climate change and shaking up established beliefs: although it focuses on energy and climate change issues, it does not ignore their social, ecological and economic offshoots

Beniamino Musto

Being able to explain complex topics in simple language (without being superficial) is what every science guru strives for. Succeeding is not a given. However, success is what has happened with *World Without End*, an essay by French authors **Jean-Marc Jancovici** and **Christophe Blain**. A book that delves in detail into the profound changes of our planet, the dependence on fossil fuels and other non-renewable energy sources, and above all the consequences of such choices, already clear for human life on the planet. The fame of the book (published by Oblomov Edizioni, belonging to **La Nave di Teseo**) translated by **Stefano Sacchitella**, has been amplified

by the enormous success obtained in France, where the volume was the 2022 best-seller, with as many as 800,000 off the shelves.

Calculating the transformation of the world

The work draws much of its strength from the language chosen to narrate these themes: the comic strip. Not only for the possibility of provid-



ing an immediate visual representation of what is being talked about, but also and above all for the ability to balance every explanation by mixing high and low language through a narrative construction in which the character Christophe Blain, in the role of the *ordinary people*, is guided by *Virgil* Jancovici inside the Dantean world that regulates our consumer dynamics and lifestyles. We are thus accompanied through the multiple interconnections that build the world we are immersed in, on a daily basis,

showing us what is hidden behind everything we no longer pay attention to, starting with the pervasive role of energy in our daily lives.

"To calculate energy is to calculate the transformation of the world," Jancovici points out, "because in this century of technical progress and abundant energy, we have become accustomed to controlling everything, to pushing the limits. In this context, machines, converters of energy, play a pervasive role in our lives that we are not aware of. 'This morning,' says the expert, 'when you got dressed, you used an impressive amount of machinery: a combine harvester for cotton, trucks that transported cotton to a cotton mill, chemical industries that produced the dyes. Your socks contain synthetic material from a petroleum derivative. So you used an oil rig, a refinery, a steam cracker...'



A compromise between drawbacks

Jancovici does not offer obvious answers. Energy is not absolutely dirty or clean. "The moment you massively use energy, however you extract it from the environment, there will be inconveniences. Choosing energy means finding a compromise between the inconveniences you are willing to accept and those you want to avoid. And since what you pay for "is not so much the energy but the work required to extract it, its price is not determined by the abundance with which it is found in nature. Abundant energy is not necessarily easy to use". And this is what would hold back the large-scale expansion of solar and wind power. The book has also sparked heated debates in France due to the fact that among the energy solutions considered most ef-

fective and with zero impact in terms of CO2 is nuclear power: a word that still sounds like blasphemy in our latitudes, but which, according to Jancovici, is among the technologies that claim the fewest victims. "Public authorities play on the huge fear of nuclear power on the basis of a misunderstanding. They choose demagoguery over pedagogy'.

The authors urge us to reflect on the dogma of growth as the only way to regulate our development. With an increasingly evident impact on the climate. 'A warming of five degrees in 10,000 years, or 0.005 degrees per century, has caused a major upheaval. And that is 100 times slower warming than we are moving towards,' Jancovici says. 'This can explode democracies, peace, the possibility for everyone to feed themselves in abundance, and live'.

What to do then? The authors do not offer pre-packaged answers. In an interview, Jancovici stated that 'in order to take action, one must have a good understanding of the situation, otherwise one risks acting without results or making the problem worse'.

THE AUTHORS

Christophe Blain, an award-winning illustrator and scriptwriter, is one of the most acclaimed authors of new French comics. His works published in Italy include the two volumes of "*Quai d'Orsay*" (**Coconino Press**, 2011 and 2012) and *Isaac the Pirate* (Oblomov Edizioni, 2021).

Jean-Marc Jancovici is considered one of the leading experts in the field of climate change; a teacher at Mines Paris Tech, and a member of the High Council for Climate Change, he is the co-founder of **Carbone 4**, a consultancy and data company specialising in climate change issues, and chairman of **The Shift Project**.



SCENARIO

1993-2023

THE 30TH ANNIVERSARY OF THE
EUROPEAN SINGLE MARKET

Single market: a European success story

Fabrizio Aurilia

The day was 1st January 1993, when everything seemed possible. On that day, the European single market officially came to life, one of the main cornerstones and drivers of the continent's integration, the result of decades of social progress, of bringing countries closer together and breaking down barriers between states that until a few years before were waging war on each other. The European single market, it is worth remembering, is a cornerstone of integration not only for business reasons, but also because it allows people, goods, services and capital to freely cross EU territories, creating strong ties where mistrust if not hostility reigned before. The single market has been (and still is) a symbol, but also a concrete instrument of freedom and opportunity, of sharing certain values, of a European way of life, which many countries just outside the EU look upon with favour, if not envy.

Just a few days have passed since the protests in Georgia, and we all still have in our minds the image of that woman holding the Union flag high, brandishing it and defending it

This year the platform for free trade and free movement turns 30. The balance is more than positive: the system created in 1993 is a symbol, but also a concrete instrument, of freedom and opportunity, of sharing certain values, of a lifestyle that many countries just outside the EU look upon with favour, if not envy

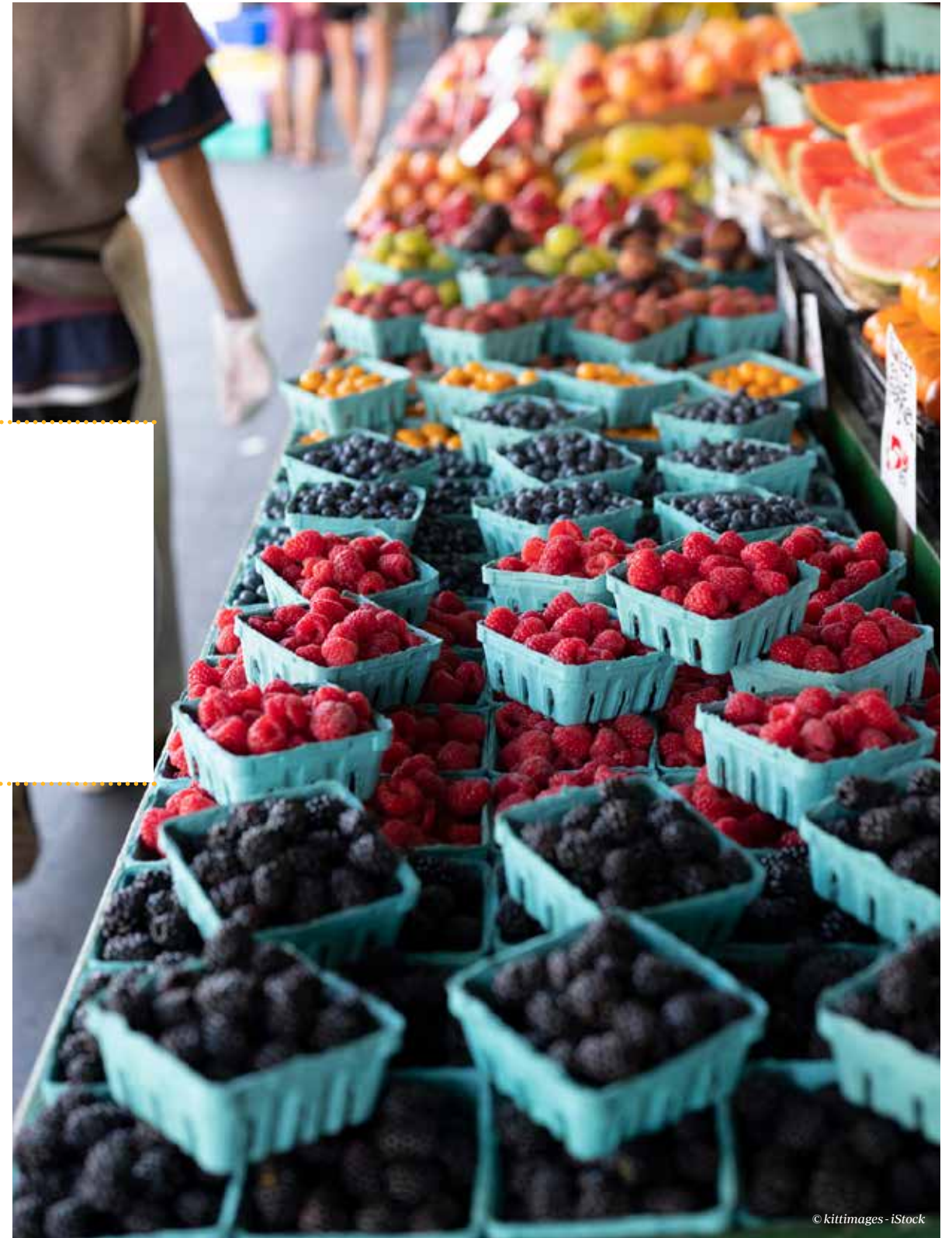
from the water cannon being hurled at her by the security forces. Not to mention Ukraine, the most striking example of the pull of the EU and its way of life.

A platform for 500 million people

The single market was established following the signing of the Maastricht Treaty on 7 February 1992. Initially, 12 countries joined: Belgium, Denmark, Germany, Ireland, Greece, Spain, France, Italy, Luxembourg,

the Netherlands, Portugal and the United Kingdom. Today, the single market comprises the 27 EU Member States, plus some non-EU countries such as Iceland, Liechtenstein and Norway, which participate through the European Economic Area, and Switzerland, which has partial access to the single market through a series of bilateral agreements.

Harmonisation and mutual recognition of the rules governing the single market have created a homogeneous space where companies can sell their products to some 500 mil-



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lion people. The single market has helped make the European Union one of the strongest trading platforms in the world, allowing it to compete, on an equal footing, with global powers such as the United States and, in recent years, China. And this is not a trivial and obvious thing for a collection of small and old states that have spent about a thousand years literally waging war against each other every single year.

Not just an economic issue

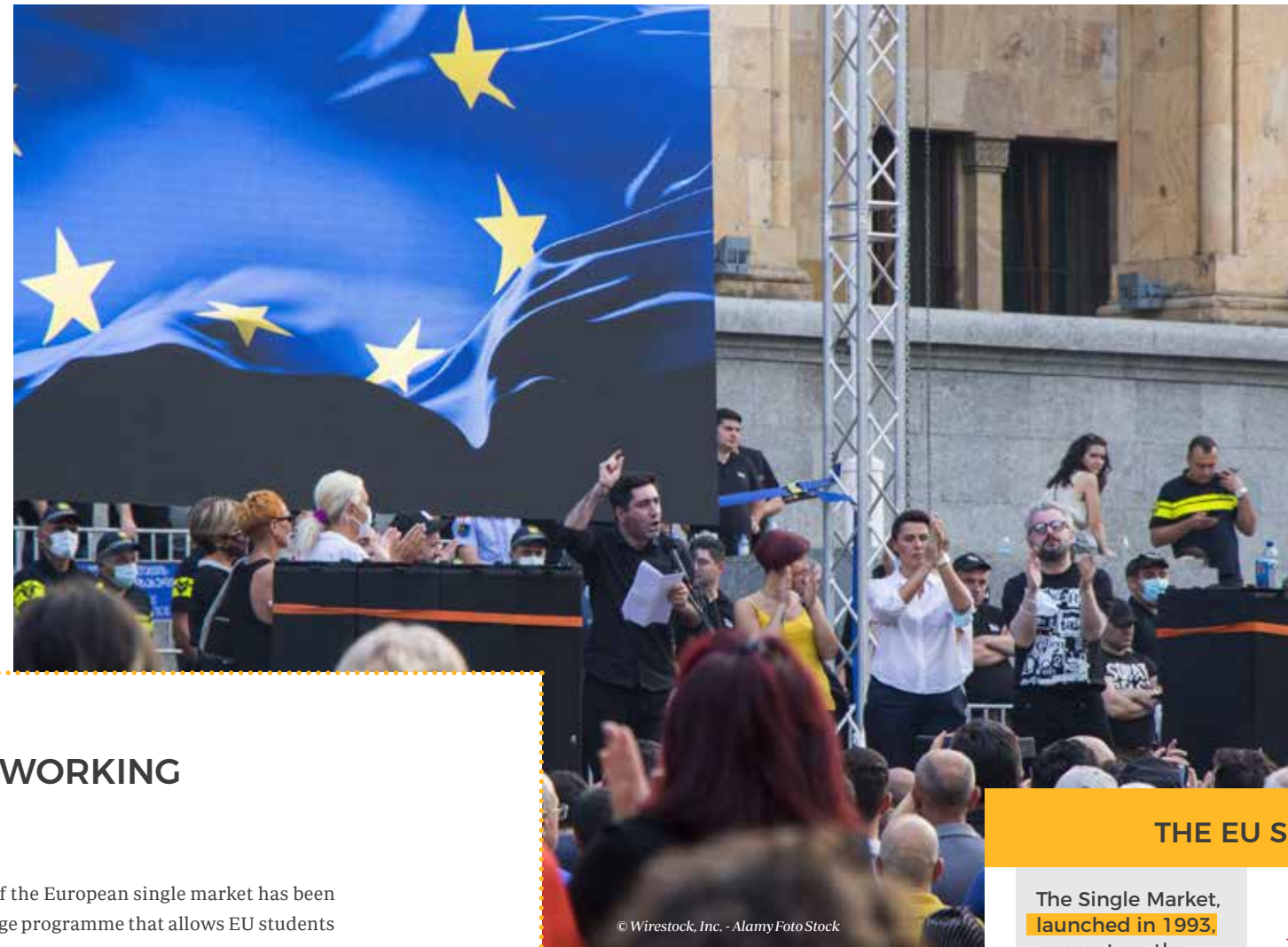
According to data from the European Commission, the removal of barriers has led to an exponential increase in trade: in 1993, exports of goods between EU countries amounted to EUR 671 billion, in 2021 these exceeded EUR 3.4 trillion. 24 million companies operate in the single market; the 2021 GDP of the single market was EUR 14 trillion.

However, it is not only an economic issue. EU citizens benefit from high levels of product safety, over 3600 standards have been harmonised by 2022 to allow all goods and services to be of the same quality throughout the Union. As many as 17 million Europeans live in an EU country that is not their home country and can study, live, work and retire in any EU country.

United in difficulties

The last few difficult years have plastically demonstrated unprecedented benefits of the single market. Sharing has been essential in dealing with the Covid-19 pandemic and

the energy crisis that resulted from Russia's invasion of Ukraine, even if Member States seemingly reacted in no particular order, especially during the harshest months of the pandemic. Although there were restrictions on the movement of people between countries, keeping internal borders open and ensuring the smooth functioning of the single market allowed vaccines, medical equipment and other useful materials to reach anyone in need. Furthermore, thanks to the breadth and coordination of the European platform, the EU institutions kept the costs of purchasing vaccines under control and ensured their safety by approving only a few, i.e. those that met the highest quality standards imposed by the Union.



STUDYING AND WORKING IN EUROPE

One of the greatest successes of the European single market has been Erasmus, the well-known exchange programme that allows EU students to study in another EU country for a certain period each year. Erasmus has involved almost 640,000 people and, again according to the Commission, over 11,000 young entrepreneurs have benefited from experience abroad thanks to Erasmus-related programmes.

Staying with the professional chapter, single market rules ensure that professional qualifications from one country are recognised by another. Therefore, lawyers, engineers, doctors, for example, can enjoy equal opportunities in all EU countries.

One of the most recent and forward-looking innovations in our increasingly digital lives has certainly been the introduction of the Data Protection Regulation, the so-called *GDPR*, which grants users certain rights, including access to their data, control over how it is used and the possibility of requesting its deletion.

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Today, Europe's response to the energy crisis has taken the form of the RePowerEU plan which, thanks to the single market, has enabled the EU to jointly draw from more diversified energy sources and accelerate the development of renewable energy. It should also be remembered that the world's most ambitious plan against climate change, the *Green Deal*, is the European Action Plan.

Improving what doesn't work (yet)

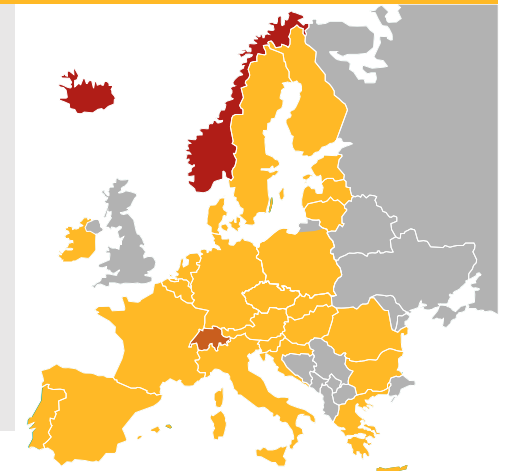
In 2022, the European Parliament approved the Digital Markets and Services Act, which sets common rules for all platforms: the aim is to create a safer, fairer and more transparent online environment. MEPs, at the same time, advocate the creation of a 'right to repair', responding to people's difficulties in getting their technological (but not only) products repaired, which end up as tons of waste that are difficult to recycle.

And tomorrow? We move forward in the direction of improving what is not yet working as it should, cherishing the unity of the peoples of Europe and valuing responsibility towards the citizens of the European Union.

THE EU SINGLE MARKET

The Single Market, launched in 1993, guarantees the free movement of:

- Goods
- Services
- Capital
- People



Current members:
 ■ EU countries
 ■ European Economic Area (EEA) agreement: Iceland, Liechtenstein and Norway
 ■ Bilateral agreements: Switzerland

Source: European Commission and European Parliament

WHEN WORK NO LONGER SATISFIES

Niccolò Pescali

More and more workers are leaving their jobs without the certainty of finding another position immediately, driven by multiple causes that lead them to be dissatisfied. This is the phenomenon of the Great Resignation, which is showing how the concept of employment has changed over time, especially among young people

has manifested itself as ongoing, changing the way work is understood.

The Great Resignation

According to the *IV Censis-Eudaimon report on corporate welfare*, in the first nine months of 2022, there were almost 1.7 million work resignations, a jump of 21.9% compared to the same period in 2021. But there is more: the figure is now 30.1% higher than in the same period in 2019, i.e. the last pre-Covid year. If one looks at the historical evolution of the phenomenon, it becomes clear that this is not an isolated event, but a continuously growing trend. From 2018 to 2022, the number of people who voluntarily interrupted their working career grew 41% (INPS) and, crucially, the driving force behind the exodus is young people. According to a *Randstad Workmonitor report*, the percentage of workers who are looking for a new job in the 25-34 age group has risen to 38%, compared to 29% of the employed, and represents a generation that has a different scale of values, in which work for its own sake is no longer the highest goal.

Very young and very mobile

The Great Resignation also represents a generational shift, from millennials to gen Z, in terms of work mentality. According to *Randstad's HR Trends & Salary Survey 2022*, 38% of Italian workers said they would be willing to leave their job if it prevented them from enjoying life. The figure, however, rises to over 50%

The Great Resignation. A phenomenon that is spreading throughout the West, including Italy. More and more people are leaving their jobs voluntarily, because they are dissatisfied and in search of new stimuli and values. According to data from the Ministry of Labour, in Italy in the third quarter of 2022, there were three million 145 thousand terminations of employment contracts, an increase of 7% (207 thousand) compared to the same quarter in 2021.

The term Great Resignation,

coined in 2021 by **Anthony Klotz**, professor at the UCL School of Management in London, labels the exodus from the world of jobs that began a few years ago overseas and spread in a more intense and grassroots manner subsequent to the *pandemic*, the condition of mental fatigue experienced during the long months of the lockdown. With the return to normality, however, that trend, which seemed to be a transitory phenomenon due to factors closely linked to an emergency situation,

among workers aged 18-25. Furthermore, the report shows how the number of employees who would rather be unemployed than unhappy at work has increased over the past year (23%), numbers that reach 34% in the 25-34 age group and, in particular, peak among millennials (76%).

Overall, according to research by **Workplace Intelligence**, 74% of millennial and Gen Z employees intend to leave their jobs by the end of the

year due to a lack of opportunities to develop their skills and, consequently, their professional career.

Dynamic labour market

Compared to the past, the tendency to want to change one's employment situation is greater and more easily contemplated. In Italy, among the causes of termination of employment relationships, resignation accounts for the highest share subsequent to the expiry of fixed-term contracts.

This increasingly subjective view leads to an intense dynamism of the labour market: the Censis-Eudamion report reveals that 46.7% of the employed would leave their current job

if they could. Young people still have the highest numbers: 50.4% would change their position if they had the chance, the same applies to 45.8% of adults and 6.3% of the elderly. A labour market that first became dynamic due to structural reasons, such as the lack of guarantees and precarious contracts, now crosses the wishes of an ever-widening number of workers who want to change in search of better conditions, not looking for the fixed job, but the ideal one. The scale of the Great Resignation phenomenon could alter how workers and employers interface, giving rise to a radical and transversal change.

The reasons for the great exodus

As Great Resignation is a complex

phenomenon, the motivations for employees to resign are manifold. Among those, the economic aspect certainly plays an important role, especially in Italy. According to Randstad, our country is second to last globally in the ranking of workers who received a salary increase in the last year, registering only 19% under this heading. Salary is not considered adequate by 44.2% of the employed, especially young people (53%) and those working in small businesses (60.2%). In addition, 65% of the employed consider the opportunities for career progression in their jobs to be insufficient. According to Randstad, the phenomenon of mass voluntary resignations is also due, particularly among young people, to the inability of companies to fully satisfy personal fulfilment. For 49% of the respondents, work would

not really offer a purpose and for 60%, private life would be more important than professional life. More and more commonly, then, work is seen in an instrumental way: for 64.4% of the employed and, in particular, 69.7% of the young (Censis), its only purpose is to procure money to live on and do other activities and, if they had the opportunity, 53% of the interviewees stated that they would choose not to work at all.

Quiet quitting: working the least possible

From the data analysed in this article, it is clear that there is a growing disconnect between values, especially of young people, and job opportunities. Discontent, estrangement from work and even the propensity to leave is very strong. However, in the absence of the possibility or the willingness to leave a job, another practice has taken hold that allows one to move away from a place one does not feel is one's own: *quiet quitting*. This is a way of *quitting without quitting*, or rather of untying one's identity from work, performing one's duties in an essential manner, devoting minimal effort and time to work. No extras: work is only done as stipulated in the contract. This is out of a refusal to put work at the centre of one's life and to get away from anxiety and stress, but often the two can be related. The crux of the matter remains job dissatisfaction, which is becoming more and more prevalent: a **Gallup** study points out that in Italy only 4% of workers consider themselves involved in their work, the lowest figure of the 38 European countries surveyed. ■



74% of millennial and Gen Z employees intend to leave their jobs by the end of the year



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A MADE IN ITALY AT ENERGY RISK

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The ceramics sector is among those defined as hard-to-abate due to the need to use large quantities of gas in the firing of materials. However, it is also one of the most active industries in terms of exports, so much so that Italy ranks first in international tile trade, on the strength of a product based on innovation, quality and design

Maria Moro

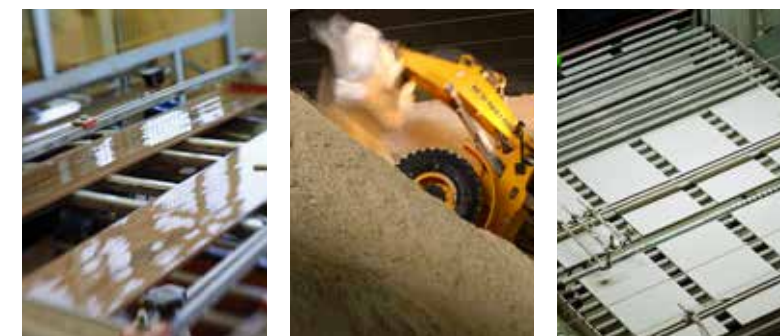
Earth, water and fire: these are the natural elements that form the basis of ceramic production. The simplicity of the mixture is the reason why this material has very ancient roots, comparable to the history of mankind.

Ceramic and terracotta artefacts, for their domestic or votive use, have always been decorated and crafted according to forms that followed the technical possibilities and tastes of the period and that make these ancient objects classifiable in time today.

A typical product throughout the Mediterranean, ceramics has also

found its peculiar, artisanal and artistic manifestation in Italy in the schools and workshops that still characterise the centre and south of the country with the production of tiles and tableware.

Over time, much craftsmanship such as industry and handmade decorations have found their way in the design and lines of Made in Italy, in a consolidated collaboration with designers and fashion names. A strong, distinctive production sector has thus developed, a player on foreign markets where it is much sought after for the quality and innovation of its products and lines.



A sector between construction, furniture and household objects

According to the description contained in the *National Statistical Survey on the Italian Ceramic Industry*, the industry is actually composed of five distinct sectors. The lion's share is accounted for by tiles, the flagship of Italian exports, characterised by a strong territorial concentration of companies in the districts of Emilia Romagna: in 2021 this type of production alone had a turnover of 6,166 million euro out of the sector's total of 7,464.

The second sector by value is bricks and masonry, with 62 companies and EUR 500 million turnover all on the domestic market; in third place are refractory materials, 31 companies with a turnover of EUR 381 million, over half of which comes from exports.

Two other areas, linked with tiles to the home segment, are sanitary ceramics and porcelain tableware. The production of sanitary ceramics can also be traced back to the capacity of a district. Civita Castellana in the province of Viterbo, which alone brings together 27 of the 30 companies in the sector. Subsequent to the pandemic-linked drop in 2020, the market has revved up again, returning to pre-Covid levels in the wake of a new desire for home furnishings that has positively affected the entire sector: in 2021 sanitary ware production marked a 29% increase over 2020 and overall the sector's turnover was 369 million euro (+20.46%), 45% of which came from exports (+8.85%).

The industrial sector of ceramic and porcelain tableware had expe-

THE STRENGTH OF THE DISTRICTS

The real strength of the sector are ceramic tiles, produced by 131 companies, 74 of which in the Modena and Reggio Emilia district alone (83.6% of national production), 11 in the rest of Emilia Romagna (the region accounts for 94% of national production) and 46 in the rest of Italy.

Over the last 20 years, the industry first experienced a slight but steady decline, culminating in a drastic drop in production in conjunction with the two-year black period of the financial crisis 2008-09 (-8% and -28% respectively) and again in 2012 (-8%), before gradually recovering (-14% in 2020) after two years of slight decline. The response was a strong rebound in 2021 driven by restructuring (production +26%, higher than the pre-pandemic figure, turnover +20%) and an estimated 2022 at the same level. More than the 110% Super bonus, it was the *pandemic effect* on housing choices that drove the growth in production: the real estate market experienced an increase in purchases and sales in 2021, as a response to people's search for a better life subsequent to the lockdown. This need translated into a +36% increase in the housing market, with 56% of residential properties purchased with first home benefits and a boom in second home purchases (+26% compared to 2019).

In line with 2021 is the 2022 forecast prepared by Prometeia, relating to the ceramic tile sector alone: sales saw a 0.7% growth in volume, more pronounced in Italy (+2.6%) than abroad (+0.2%), with production at +3% and over seven billion euro turnover.

Exports represent a fundamental share of the sector's turnover: in 2022 the Italian market covered 20% of tile production, 48% was exported to EU countries and 32% to the rest of the world. These figures make our country the world's leading exporter of ceramic tiles with 5.24 billion euros in value and a 31% share that touches over 180 countries (in second place is China with 3.47 billion). In 2022, sales grew particularly in the Gulf countries and the Far East, stable in Western Europe, the Balkans and Latin America, and declining in North America and Eastern Europe.

rienced a period of great prosperity and affinity with Made in Italy in the second half of the last century, only to then suffer greatly from globalisation (especially in the large-scale distribution channel), so much so that today 49% of imports of cups and plates come from China. Limited to industrial companies, thus excluding the large number of handicrafts, today only nine companies operate in Italy, with a total turnover of 47 million euro, 34% of which comes from exports, to which 23% of production is destined.

The circumvented impact of the war in Ukraine

Supply chains are strongly integrated with foreign countries both for the logistics system supporting distribution and for the procurement of raw materials.

In export, the strength of the ceramic tile sector also rests on the ability of companies to work as a system, presenting themselves at trade fairs and events abroad under the *Ceramics of Italy* brand of origin.

With regard to raw materials, until the 1970s, the Modena and Reggio ceramic district used local resources; the growing need then led it to look to the rest of Italy and abroad. At present, the 10 million tonnes of clay, sand and feldspar come, not only from Germany, France, Turkey and Ukraine: about two million tonnes of raw materials used to flow in from the country attacked by Russia, and the interruption due to the invasion made it necessary to look to other markets (e.g. India), albeit with the cost increase that affected all components. The sudden suspension of imports from Ukraine did not, however, lead to any interruption of activity; instead, research and innovation in the chemical laboratories helped modify the compositions of the mixtures, due to the different characteristics of the available soils.

Energy for a sustainable industry

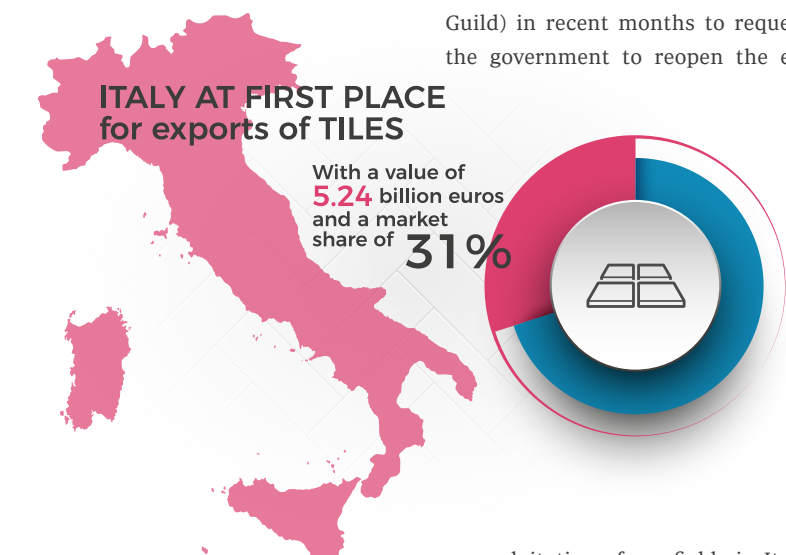
Ceramic is by nature composed of natural elements, but its entire life cycle and use is based on the logic of

sustainability. The ceramic product is long-lasting, does not emit pollutants and is fireproof. Some of its applications are also in plant engineering and energy-saving construction, for example in underfloor heating systems or ventilated facades.

Rather, the challenge for companies has been to optimise consumption during the manufacturing stage, reducing costs and the environmental impact. The sector is among those defined as energy-intensive, even

though much has been done to make such processes more efficient: gas is used in particular for the high-temperature cooking of products, a phase that for the available technologies cannot find an alternative in the electrification of the process to date. Just how central the issue of energy costs is for the entire sector is summed up by the figure of over one billion euros of cost increase resulting from the thermal component alone.

The burden of energy costs has led **Confindustria Ceramica** (Ceramics Guild) in recent months to request the government to reopen the ex-



ploitation of gas fields in Italy for the benefit of energy-intensive companies, a way to ensure business continuity and competitiveness in foreign markets.

On the other hand, innovation and technology have made it possible to optimise water consumption, which has been reduced by over three million litres per year thanks to the recovery of waste water, and to recover 100 per cent of manufacturing waste, which is recycled and fed back into the manufacturing process. ■

THE RESPONSE TO NEW VIRUSES

The inauguration of a mega pig farm in China generates fears about the possible development of new pathogens: is there a possibility of falling into the sad scenario of the coronavirus? Zero risk, as per microbiologist Claudio Bandi, does not exist: that is why it is important to put the lesson of Covid-19 into practice

Giacomo Corvi

Last October, China inaugurated what has been described as 'the largest pig farm in the world'. Two twin, parallel buildings, 26 floors of reinforced concrete and steel, an area of over 800,000 square metres that, once the facility is fully operational, will allow up to 1.2 million pigs to be raised per year. By contrast, a normal intensive pig farm in Italy, just to get an idea, can have a maximum of a few thousand. The news immediately caused a great stir. First of all, because of the conditions these animals will be forced to live in, conceived, born, raised, fed and finally sent for slaughter within the walls of a building as tall as the Big Ben tower and which animal welfare associations have immediately dubbed the *pig factory*. And also because of the health fears that such conditions, three years subsequent to the outbreak of the Covid-19 pandemic, may generate in the population. Also fuelled by the fact that the farm

is located in the Chinese prefecture of Ezhou, in the province of Hubei, practically an hour's drive from Wuhan, which, perhaps in a *wet market*, gave birth to the new coronavirus. The question arises: is it possible that this mega-farm could one day prove to be an extraordinary reservoir for the development of new viruses? 'Any judgement, at least for the time being, can only be incomplete, because we do not have a clear and reliable information on working models and safety protocols,' warns **Claudio Bandi**, professor of microbiology at the Department of Biosciences at the University of Milan. "The available information," he continues, "suggests that this will be a closed-cycle herd, that the flow of animals will be limited to the physiological turnover of sows, and that the risk of contamination from outside, and vice versa, will be minimised by adopting appropriate safety measures.

Fear of the plague

A recent report in the *New York Times* spoke of a monitoring system with 'high-definition cameras and uniformed technicians working in a Nasa-like command centre'. Each floor, the article continued, 'functions as a self-contained environment for the different stages of the pig's life'. And flow of workers between the various levels, in terms of both animals and employees, should be kept to a minimum.

The facility, built by **Hubei Zhongxin Kaiwei Modern Animal Husbandry**, cost around four billion yuan, just over half a billion euro. China is both the largest producer and the largest consumer of pork in the world. The resource is so fundamental to the country's economy and culture that the government has a national pork reserve. And in 2019, in the aftermath of the swine plague wave that heavily affected the sector, the Beijing authorities mandated all ministries to support the market. "Structures of this kind arise precisely from the fear that phenomena such as swine fever could reoccur," Bandi notes. 'Considering the investments that have been made,' he adds, 'it is natural to think that the farm will be equipped with all possible safety measures to prevent the development of epidemics within the facility. After all, a pig ready for slaughter can be worth around 200 euro: considering a population of 1.2 million, it is easy to understand what the economic consequences of an epidemic could be.

Zero risk

Zero risk, however, does not exist. 'No matter how state-of-the-art and manned the facility may be, there is always the possibility of a virus getting inside the farm,' Bandi notes. And here you would be faced with what the expert defines as 'a potential paradise for pathogens such as viruses and bacteria: a very large population, a contagion that could be difficult to limit, especially for pathogens capable of causing subclinical infections, not very evident: all this could allow the pathogen



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What to do in the event of a new pandemic? Put into practice what the coronavirus has taught us

to remain in the herd for weeks or months, a sufficiently long time to allow an evolution of the virus or bacterium that could favour the leap of species, the so-called *spill-over*, from pig to human'. If an infected operator were to return home without following the necessary hygiene and prophylaxis measures, fears would become reality.

The only positive news, for Bandi, is that 'in any case we are coming from the coronavirus experience: the Chinese population has experienced Covid-19 first-hand and, on this basis, I expect that the authorities have become aware of the risks of infectious diseases and will therefore prioritise the adoption of precautions to prevent a Covid-19-like experience from happening again'.

Furthermore, he continues, 'I expect them to have the expertise and financial wherewithal to ensure the health of the herd and the safety of the entire facility. Competences and resources that other countries do not have, however, and which are perhaps at this very moment moving

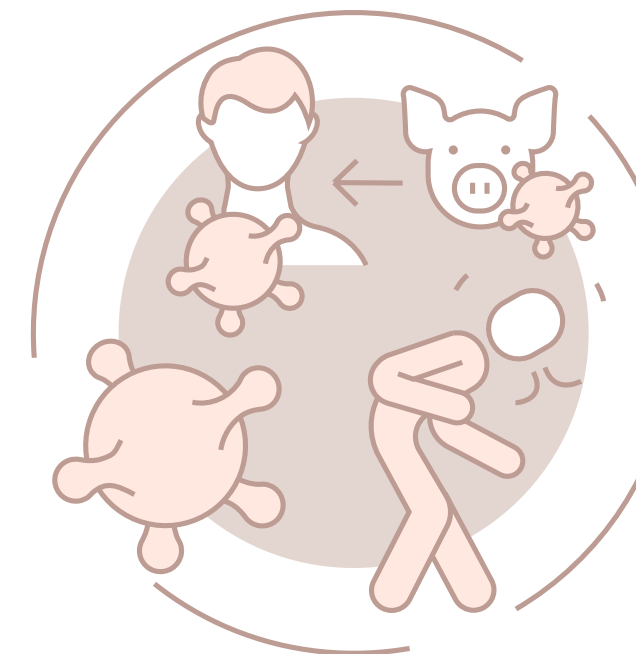
towards intensive forms of breeding. "Honestly," Bandi says, 'this worries me the most.

The Covid-19 lesson

So what to do in the event of a new pandemic? First of all, Bandi advises, put into practice what the coronavirus has taught us. 'Intervene immediately, avoid wasting time, and finally arrive at a true real-time sharing of the information collected and generated by microbiology laboratories and epidemiological analysis services around the world.' Then, he adds, 'adopt a system such as *hazard analysis and critical control points* at the

most delicate junctions for the development and spread of viruses and other pathogens, such as intensive livestock farms and airports, identifying critical factors and processes that can be easily checked for the presence of pathogens'.

Last but not least, preventing humans from harming themselves. "It is often man himself who contributes to the spread of viruses and other infectious agents, for example through phenomena such as the fragmentation of forests that alter ecosystems and encourage species jumping," Bandi comments. 'Climate change,' he adds, 'has then allowed alien species to stabilise in our territories, bringing with them exotic pathogens and ensuring the possibility of their transmission to our latitudes, for example by means of mosquitoes of tropical origin'. The expert concludes with a hint of optimism. 'I don't think that in the coming decades we will fall back into the situation we found ourselves in with the coronavirus. However, if it ever happens, consider that in the last three years we have acquired expertise and awareness, and we have directed resources to research into infectious diseases: I believe that today we are all better off to prevent what happened with Covid-19 from happening again'.





*Peru, the deep roots
of a crisis*

A RIFT BETWEEN THE THREE SOULS OF THE COUNTRY

The drama that the Latin American country has been going through for months is just the latest stage in a journey that seems to keep getting stuck, in which the protagonists change but the difficulties only get worse. This is because, since the end of the Fujimori regime to date, on a social and institutional holding level, Lima has not yet managed to reach a mature level of democracy, as Massimo De Giuseppe, professor of contemporary history at the IULM in Milan, explains

Beniamino Musto

On the same day the media attention in Italy was focused on one of Italy's most important cultural events, the debut of *Boris Gudonov*, which inaugurated the season at La Scala Theatre in Milan, on the other side of the world, in Peru, dramatic and high-octane events were being experienced. On 7 December 2022, President **Pedro Castillo** attempted a *self-coup*, announcing the dissolution of Congress, with an uncertain and adventurous speech whose result was of triggering, within a few hours, a coordinated reaction of Congress, the judiciary and law enforcement. Castillo was dismissed and arrested by his own security detail, while the leadership of the country passed to the Vice-President, **Dina Boluarte**.

From that moment on, loud and violent protests arose in different parts of the country, particularly in the southern regions with an indigenous majority, calling for Boluarte's resignation, the dissolution of parliament and early elections. This dissent was repressed with an iron fist over the months by the government in Lima, leading to tragic results, with the death of dozens of protesters.

Three entwining issues

The drama that Peru finds itself in, once again, has deep roots and is the result of a twenty-year period in which, from the end of **Alberto Fujimo-**

ri's presidency (in power from 1990 to 2000), the country has never managed to reach a tangible democratic maturity. This is what **Massimo De Giuseppe**, Professor of Contemporary History at the Iulm University in Milan, and author, together with Professor **Gianni La Bella**, of the book *Storia dell'America Latina contemporanea* (published by il Mulino, Bologna, 2019), explains to the magazine. According to De Giuseppe, 'Peru has a series of structural problems inherited from the past that, in the short Castillo presidency, have exploded in a particularly significant way'.

In the last 15-20 years, three major crises have entangled: "institutional, marked by the fragility of the post-Fujimori democratic apparatus, which has often generated short circuits between institutions: the presidency of the Republic, Congress, and the judiciary". The second element is the country's difficulty in maturing. Social inequalities are very strong, and there is also an inability to have an overall vision, capable of capitalising on opportunities. De Giuseppe cites as an example of remittances from Peruvians who have emigrated abroad, over the last 30 years: 'a flow of money that has been managed inconsistently, in which the financial resources that have arrived in the country have not had a growth and development effect, without any rational investments'. In more recent times, there has also been a dearth of welfare laws,

which emerged in a particularly dramatic way during the Covid-19 pandemic, where Peru 'stood out in Latin America as one of the countries that managed the emergency worst'.

Amidst all this, and we come to the third element of the crisis, the polarisation of wealth has generated a dynamic wherein the country has had 'a small elite which, since the post-colonial era, has never redefined itself, giving shape to a classist cultural scenario that is particularly significant compared to other countries on the continent'.

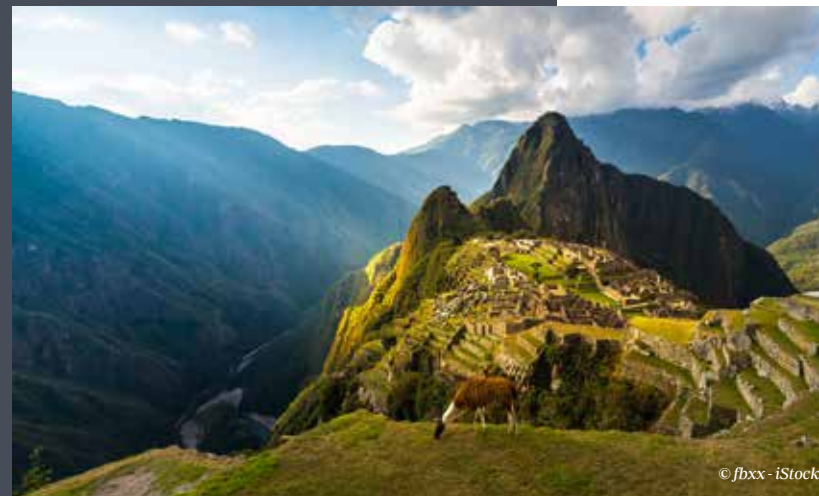
The country's contin-



THE ROLE OF THE CATHOLIC CHURCH

The Peruvian Catholic Church has historically played a very important role in the entire Latin American scenario. Think of the role of the Peruvian **Gustavo Gutierrez**, the 'inventor' of that *Liberation Theology* that has had enormous influence in the Latin American Church since the 1970s. 'The Peruvian Church,' explains Professor Massimo De Giuseppe, 'has been very polarised, articulated, complex, divided. In the 1970s, it played a role with some very important policies in the affirmation of social pastoral care for the poor, but it had almost more of an impact in the regional peripheral dynamics, where it acted with very interesting experiences, than on the ability to play a political role'. In this there is a dichotomy that has never been fully resolved in the Peruvian elites, who call themselves Christian but keep alive the dynamics of immobility that ballast the country. "In the pontificate of **Francis**, the Peruvian church, after some rather difficult years of stagnation in which it had experienced a sort of marginalisation of its more social drives, seems to have rediscovered that innovative idea of social - pastoral".

The Peruvian Church has gained great recognition among the popular classes for its support for the work of the commissions of remembrance for the violence committed during the years of the struggle between the state and Sendero Luminoso. "Some diplomatic negotiation initiatives have been launched to support a return to calm. Certainly the Church has the potential to set in motion a process of dialogue: it may not have decisive power but it is certainly an important actor,' De Giuseppe concludes.



gent problems, therefore, are in turn embedded in these structural frailties 'highlighting a weakness that, starting in the capital Lima, is amplified in large peripheral cities such as Cuzco, and then becomes exacerbated in the country's rural areas'.

From Fujimori to the Odebrecht scandal

Re-weaving the threads of the country's recent history, De Giuseppe retraces the fragilities that have emerged in the 21st century commencing with the Fujimori era. A decade characterised by an authoritarian regime with a neo-liberal economic model that was in some ways inspired by **Augusto Pinochet's** experience in Chile, but with a power structure in which the army did not play the same role as in Chile, as Peru was not only very different (also much more uncontrollable than Chile), but also had to reckon with the **Sendero Luminoso** guerrillas, in years marked by an escalation of unrestrained violence. 'In that stage,' explains De Giuseppe, 'some elements that had held the institutional apparatus together, albeit with fragility, were in fact dismantled. When Fujimori's rule came to an end, **Alejandro Toledo**, an economist and sociologist who had the task of leading the country towards full democratisation, became President in 2001.

'A process was set in motion whereby great waves of popular enthusiasm for change were curbed very quickly'. Toledo introduced a series of social and economic reforms linked to the *Washington Consensus* framework, but fundamentally, the reformist mechanism jammed, clashing with the structural reasons stated above. And here began an array of complications.

In 2006, **Alan Garcia** returned to the presidency (he had already been president from 1985 to 1990), then in 2011 it was the turn of **Ollanta Umala**, 'who presented himself, a bit like Castillo, as an indigenist leader,' comments the professor, 'accompanied by a great popular afflatus. However, after a few months in power, his policies turned out to be exactly the same as those of his predecessors'. The election of **Pedro Kuczynski** in 2016 then opened a period of chaos. These are the years of the **Odebrecht** scandal, the corruption investigation linked to the Brazilian construction giant, which engulfed much of South American politics. Kuczynski was impeached, while Alan



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Dina Boluarte



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Peru has distinguished itself in Latin America as one of the countries with the worst management of Covid

Garcia tried a theatrical suicide, by shooting himself in front of the police who were about to arrest him.

The country then enters a period in which its structural problems fester and become increasingly uncontrollable. Castillo's election comes in January 2021. Originally from Cajamarca (in the north of the country), a teacher and trade unionist, Castillo won the election with the Marxist party Peru Libre presenting himself as an indigenist, campesino leader. He claims to know the trade union dynamics, and presents himself as a protagonist of the social struggles. 'On paper,' comments De Giuseppe, 'an attempt to relaunch the wave that had led to the rise of **Evo Morales** in Bolivia. In fact, however, Castillo proves himself politically incapable of holding Peru's complexity together'. In his 16 months in government, Castillo changed 70 ministers and five prime ministers, without managing to implement any of the major reforms he had promised the country. 'This creates a situation in which those elements of institutional maturity present in other Latin American countries, in which even in critical situations, one manages to maintain a balance, are lacking,' comments the professor. Faced with the dead end of the stalemate, Castillo has played the desperate and senseless card of self-rule.

A country strongly divided

Yet Castillo's election itself had initially been an encouraging sign of the institutions' resilience, since the defe-

ated candidate, **Keiko Fujimori** (Alberto's daughter, exponent of the extreme right-wing party Fuerza Popular) had contested her challenger's victory by requesting the annulment of 200,000 ballot papers for alleged irregularities, an accusation that proved unfounded. According to De Giuseppe, these ups and downs are constants in Peru in recent years. 'From 2001 onwards, a mechanism that seems to bode well is often regenerated, but at a certain point it implodes. Each time, a new short-circuit is created as soon as the real nodes of the situation are touched. Peru,' is De Giuseppe's snapshot, 'is currently a very divided country. There is a gigantic fracture between the sierra, the coast and the jungle, the three souls of this country. It is an ancient fracture, to which today, however, very specific dynamics are added. Because within the crisis of the Peruvian institutional system there is also a difficulty for the centre to relate with the peripheries. And there is also a fracture between non-indigenous and indigenous, where the Qechua, Aymara and indigenous

peoples of the Amazon have been increasingly mistreated and forgotten'.

The comparison with Brazil, Bolivia and Ecuador

So what does Peru need to unravel? 'The country,' explains De Giuseppe, 'would need a middle class that we could define as socially active. Peru has never seen the introduction of Keynesian or post-Keynesian measures. Even Brazil, a country with an exasperated polarisation of wealth, has experienced experiments in this sense in some passages of its history, starting from the years of **Getúlio Vargas**' presidency. Peru, on the other hand, has remained a laggard on the continent in this respect. Even the attempts made in the late 1960s and early 1970s by the various left-wing military juntas, which had tried to create, through the army, a rural and urban middle class, had failed'. There is also a structural problem with political organisations. Still making a comparison with Brazil, a political project such as **Lula da Silva**'s, which since 2002 has triggered profound changes in his country, was possible because at its base it had a well-structured organism, the Partido dos Trabalhadores, which, the professor observes, 'is part of a party-political network that gives it a certain base and the ne-



cessary strength to initiate reforms. Such a thing has never happened in Peru. Even reformist presidents (at least on paper) have never managed to initiate serious reforms. A further element for reflection,' adds De Giuseppe, 'concerns the forms of movements and associations: paradoxically, despite all their ideological impetus, the movements that supported Evo Morales in Bolivia and **Rafael Correa** in Ecuador were very cohesive and with a strong capacity for political impact, something that the Peruvian indigenist movements do not have. In Peru there is a greater difficulty in making critical mass, and the forms of mobilisation are also much more complex: this is one of the elements of fragility of a country that would have a very interesting potential'.

An uncertain horizon

The task of governing this complexity is now in the hands of Dina Boluarte, whose resignation is being clamoured for by the part of the country that has taken to the streets, while another portion of Peru (among them the Nobel Prize-winning writer, **Mario Vargas Llosa**) approves of her handling of the crisis. Boluarte is a fundamentally unknown figure, as the figure of the vice-president in Peru is rather fragile. 'She is a sort of institutional rebalancer, but has no significant political weight', says De Giuseppe, who admits: 'Boluarte does not appear to have a great *physique du role* to deal with this serious situation'. The country, according to the professor, 'mainly needs a political culture and maturity. The idea of waiting for yet another charismatic leader who cyclically proposes to unravel in a short time the profound knots that the country has been carrying around for decades can certainly no longer work. "Peru needs a maturation first of all of its ruling classes, which can start a process of political incorporation and real democratisation. It is a complicated and long path, I do not see it as an immediate process. I believe that as a first step we now need a stage of return to order, but then we can start some structural reform. I am optimistic by nature,' De Giuseppe concludes, 'and I hope that sooner or later, we will be able to put this institutional apparatus back together and make it more functional, creating a greater degree of participation and awareness among the ruling classes. ■



ENVIRONMENTAL POLLUTION, WHO PAYS THE BILL?

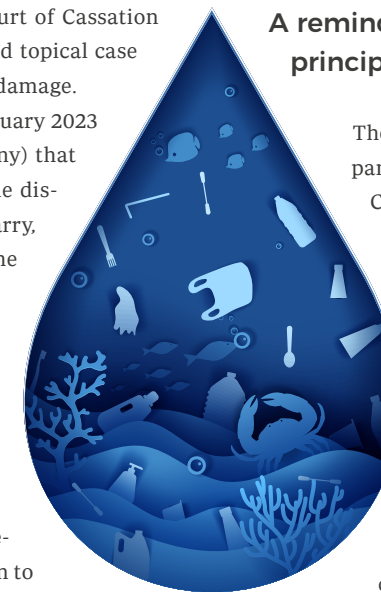
Cinzia Altomare

The liability of companies involved in ecologically relevant operations is at the centre of a recent and important ruling by the Civil Court of Cassation, which sought to resolve the uncertainty in those cases where it is not possible to identify the person responsible for the damage, but only to reconstruct the chain of succession of those who, over time, managed the site

The United Sections of the Civil Court of Cassation recently ruled on a very interesting and topical case concerning liability for environmental damage.

This is Judgement 3077, dated 1 February 2023 on the case of a company (the Company) that had built a landfill site, in 2021, for the disposal of municipal solid waste at a quarry, which was used as a storage site for the collected waste.

Investigations conducted by **Arpa (the Regional Agency for Environmental Protection)** had subsequently revealed that the underlying aquifer exceeded the so-called *contamination threshold concentrations*. The Ministry of the Environment had therefore ordered the company to take action to ensure the emergency safety of the contaminated aquifer and adopt measures to implement the necessary prevention and remediation, according to the provisions of Legislative Decree 152/2006 (*the Environmental Code*, which transposed the *ELD*, the European Environmental Directive).



A reminder of the 'polluter pays' principle

These measures were challenged by the company, initially in the Regional Administrative Court and then in Tsap, the Superior Court of Public Waters. It stated that the provisions of the Environmental Code had been infringed, since the company did not hold itself responsible for the environmental damage caused. It added that the real party responsible for the contamination had not been identified, since the events were not accidental, but a widespread pollution phenomena (where it is not possible to clearly assign responsibility to a specific person).

The Upper Tribunal of Public Waters, while accepting that the process of pollution of the land could not have begun with the establishment of the Company on the site, concluded that the burden of taking emergency safety measures was in any case on the owner or holder of the site itself, regardless of whether he was at fault or not.

In this regard, reference was made to the scope of the *polluter-pays* principle directly descending from the Environmental *Liability Directive 2004/35/EC*, according to which, particularly for operations in the area managed by the Company (referred to for this purpose in Annex III of the same directive), it would be sufficient to have caused an environmental hazard, according to the objective liability criterion set forth therein.

The Supreme Court verdict

The company therefore appealed to the United Sections of the Supreme Court. The question put before the Supreme Court concerned the “contestation in the case of the ‘polluter pays’ principle set forth in Directive 2004/35/EC and, in any case, of any environmental liability, even on an objective basis or disregarding conduct causing the damage, on the part of the owner/manager required to provide emergency safety measures, in the absence of the identification of the person responsible for the potential contamination”.

According to what the United Sections stated, from an integrated reading of the provisions of Directive 2004/35/EC and the Environmental Code, there would be no direct obligation on the owner of the contaminated site to take emergency safety measures, unless he is recognised as the author of the contaminating conduct.

Community indication excluded

Article 308 of the Environmental Code excludes the costs of precautionary, preventive and remedial actions from the charge of the operator carrying out an environmentally relevant professional activity, if he proves that he is not guilty of wilful or negligent conduct, or in the case of so-called diffuse pollution.

Therefore, “it must be excluded a Community indication to the reparation of the damage (...) charged

to those who have not carried out the professional activity of operator, but are called to respond in the capacity of owner of dominant rights or even, as in this case, with etiological link excluded by the same judge of the ascertained conduct, not being able the mere statement of indications of position, for an activity not classified by the same legislative decree no. 152 of 2006 at risk of pollution, replace per se the proof of the aforementioned necessary causal link”.

The new owner between duties and responsibilities

In practice, what gains importance in the eyes of the Supreme Court is the distinction between the duties incumbent on the owner blameless for the pollution and the actual polluter. The latter’s duties would be limited to what is provided for in Article 253 of the Environmental Code. The polluter is thus obliged to take appropriate preventive measures to counter an event that has created an imminent threat to health or the environment, in order to prevent or minimise that threat.

From the figure of the blameless owner, however, the figure of the polluter must be distinguished, who is more stringently obliged, pursuant to Article 242 of the Code, to adopt the necessary prevention and emergency safety measures, as well as the reclamation of the polluted site.

According to this assumption, the administration cannot impose on the owner of a polluted area, who is not also the polluter, the obligation to carry out emergency safety measures and remediation.



Causation cannot be disregarded

It must also be taken into account that, in the light of the revision of Articles 9 and 41 of the Constitution, implemented by Law No 1, dated 11 February 2022, the system of distribution of environmental liability is hinged on the pursuit of reparation of the damage, or on public

intervention, in the event of inertia on the part of the party actually responsible or in the event of its failure to be identified.

The criterion of imputation of liability for environmental damage, according to the ‘polluter pays’ principle, cannot therefore disregard the ascertainment of the causal link between the activity carried out by the operator and the pollution itself, as well as the ascertainment of the necessary psychological element (guilt or wilful misconduct of the responsible party).

This logic seems to clash with the principles set out in the European directive from which the Environmental Code derives, since, in Annex III, it specifically mentions waste management activities as being subject to liability of an objective nature, that is, irrespective of the identification of the conduct causing the damage. On the other hand, however, the directive excludes all diffuse pollution, which appears to constitute the type of contamination in question.

Responsibility difficult to ascertain

It would therefore seem that the choice made by the United Sections pushes in the direction of wanting to safeguard the cardinal principle of our legal system, based on the ascertainment of the three basic elements (the fact, the unjust damage and the causal link that strictly unites them), in the face of the direction taken by the directive, which is instead committed to finding a way to nail all those who operate in areas recognised as dangerous for the environment itself to their objective responsibility.

This will sought to resolve the wide margin of uncertainty in all cases where it is not possible to precisely identify the person responsible for the pollution, but only to reconstruct the causal chain between the damage and the activity of several operators who succeeded each other, for



“ **The role of the polluter must be separated from that of the blameless owner** ”

example, in managing the same site. This is because in the majority of cases it would remain for the public administration alone to bear the often huge costs of environmental remediation.

The ruling is therefore a positive fact for companies involved in environmentally relevant activities. However, the problems arising from the difficulty of identifying the responsibilities of the various parties that may succeed each other in the management of the same site remain unresolved, since for them, the indications of the environmental directive push decisively in the direction of a presumed and objective responsibility, which is very burdensome for the companies themselves, due to the high costs involved in the reclamation activities. ■

When justice turns into a painstaking machine

Niccolò Pescali

Deception. Alessandro Barbano takes the reader on a long and winding journey inside a judicial machine that has become powerful and dangerous: the Antimafia. Which, in order to fight organised crime, ends up overturning the rule of law and operating an arbitrary power based on prejudice and suspicion

Alessandro Barbano's *L'inganno* is an all-out attack on punitiveness, where an increasingly authoritarian judiciary is unmasked in its unscrupulous methods which dictate that freedom

can be sacrificed in the name of fighting crime. This is what the Antimafia feeds on today according to the author, a perpetual emergency situation in which to implement special ad hoc laws, a procedure that from exception becomes the norm, constituting the justification for slowly unhinging the rule of law and 'putting the entire society under judicial

protection'. Preventive seizures and confiscations, sentences that anticipate laws, hundreds of citizens arrested and summarily tried, whose lives are changed by that system 'that everyone in Europe envies us', but which no one else applies.

Barbano sifts through a system, the one created by the Anti-Mafia, which has become invasive and despotic, which no one can subject to a judgement of legality or merit because it is too firmly entrenched in the bureaucratic, judicial and political fabric of the State and, in addition to this, has managed to create the perfect

environment in which to survive: to make the emergency pass as a dogma. And this is how the Anti-Mafia Code tramples on two fundamental principles: the principle of non-guilt and the protection of the innocent, translating what it calls 'preventive measures' into actual sanctions. In the moral posture of the Anti-Mafia what dominates, therefore, is prejudice: mafioso, corrupt and innocent are placed in the same cauldron, suspicion is elevated to proof, in what is defined as a veritable 'judicial persecution'.

The book published by **Marsilio** sifts through real-life cases, such as that of the Cavallotti family, from which the double soul of the State emerges: that linked to the criminal trial that acquits them and that of the prevention process with the related confiscation of assets, which



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“A system ‘which is the envy of everyone in Europe’, but nobody applies

THE BOOK

Title: L'inganno

Author: Alessandro Barbano

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Publisher: Marsilio

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“Barbano sifts through the Anti-Mafia culture, which has become invasive and despotic

punishes them in order to subsequently get their hands, in a predatory manner, on gigantic economic interests, revealing a judiciary that manages hundreds of businesses. The law is continually overridden by moralistic intent and thus the process also loses its guarantor nature. The author points out how the diaphragm of independence between the judge and the accuser is completely blown up, making the judge's impartiality something merely fictitious.

The Italian anomaly

The book, written as a candid and straightforward account, points the finger at a sacred monster such as

Don Ciotti's Libera association, guilty of being a monopolistic and politicised tool of management of assets seized from the mafia. Barbano makes no concessions in the search

for the deception, from which his book takes its name, which is renewed in that paradigm of the emergency within which the power of the Anti-Mafia Code is grafted, “a gun pointed at democracy”, which uses the mafia emergency as a guarantee of impunity before international courts. In order to remove the state from judicial protection, it is necessary to root out the illiberal soul that characterises the judiciary, which in the name of a perpetual emergency stands as a summary judge, where only suspicion separates the legal from the illegal. ■

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