

DIGEST

# INVESTOR

In-depth Analysis from Investor.BG, Bloomberg TV Bulgaria and Bulgaria ON AIR

14 / 2022

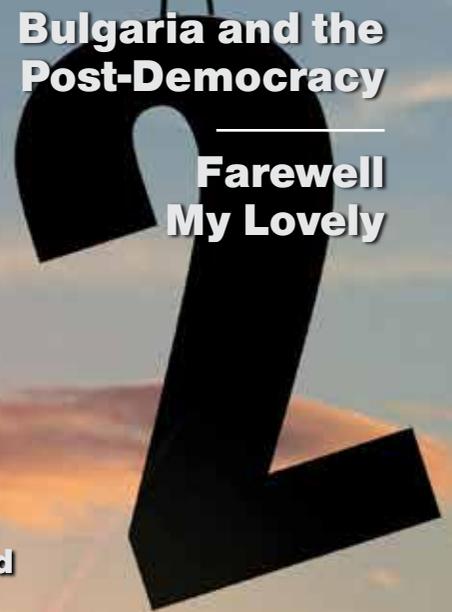
## THE BIG QUESTIONS OF 2022

The euro, the pandemic, the future of travel: this year should give some of the most important answers for Bulgaria

**Boarding  
the Titanic?**

**Bulgaria and the  
Post-Democracy**

**Farewell  
My Lovely**



**SPECIAL REPORT: THE GREEN DEAL**

# INSURANCE "FAMILY SHIELD"

Protect your family home with a 20% discount  
until the end of February

For more details visit [www.armeec.bg](http://www.armeec.bg)



**Always with you!**

**GET YOUR HOME INSURED AT A SPECIAL PRICE! "FAMILY SHIELD" INSURANCE TAKES CARE OF YOUR HOME AND PROPERTY'S SAFETY AND SECURITY.**

The benefits offered by "Armeec" Insurance Company:

- Home security for a minimum fee of BGN 10
- 20% discount on the insurance fee
- Insurance coverage fully tailored to your property needs your home and property
- Quick procedure and expert advice when taking out insurance
- Choice of insurance risks
- Cover against burglary and theft by technical means up to 14 000 BGN without an inventory of the property
- Timely reimbursement of damages in the event of an insured event
- 24-hour Assistance Centre with telephone numbers: **0 700 139 39 u 0887 922 444.**

Purchase of "Family Shield" insurance at:

- The offices of Armeec Insurance Company
- Insurance brokers and agents, partners of the company

**THE PROMOTION IS VALID UNTIL  
28.02.2022 г.**



# The Virus That Killed Science

„The good thing about science is that it's true, whether you believe it or not,“ says Neil deGrasse Tyson, an astrophysicist and television presenter. After the Enlightenment, science really succeeded in overcoming faith and establishing itself as the dominant method of decision-making for mankind. But now, in the third decade of the 21st century, the rejection of the scientific method has once again become a mass phenomenon - this time not on the basis of religion or prejudice, but on the basis of... science.

**A** KEY ELEMENT OF THE SCIENTIFIC METHOD is questioning, challenging the conventional. Or, as Carl Sagan, another great science communicator and Tyson's teacher, said, „Skeptical scrutiny is the means, in both science and religion, by which deep thoughts can be winnowed from deep nonsense.“ But at the dawn of the new century, a field of science that did not tolerate skepticism and challenge suddenly emerged: the theory of global warming. Those who doubted it or expressed an alternative to the common opinion were not challenged in disputes and arguments, but simply isolated - both from the media attention and from funding which is so vital for modern scientists. Anyone who dared to object to the canon was and continues to be stigmatized as a paid servant of the oil or some other „old-fashioned“ industry (by the way, few realize it, but the oil giants were among the first to ride the wave of the „green“ transition. They are willing to profit from it in the same way they have profitted so far - or even more).

AND SINCE LAST YEAR, THERE HAS BEEN A SECOND AREA in which the expression of alternative opinions is a heresy: the fight against Covid-19. This is not about anti-vaxers and ordinary ignoramuses on Facebook. These are serious, respected scientists and doctors. Such as the authors of the infamous Great Barrington Declaration, which called for lockdown to be replaced by a new approach of focused protection for more at-risk patients. The authors were Dr.

Martin Kulldorff, a professor of medicine at Harvard University; Dr. Sunetra Gupta, Professor of Epidemiology at Oxford University; and Dr. Jay Bhattacharya, a professor of medicine at Stanford. Even individually, their names should ensure that they are listened to carefully. Instead, they were thoroughly isolated. Kulldorff was even subjected to a 'comradely trial' in the British Medical Journal as 'the new merchant of doubt' - „as if skepticism and challenge is regarded by BMJ as something to be condemned“, he replied. „Note here how something that challenges an orthodoxy is described as anti-

## VIRTUALLY EVERY SCIENTIFIC BREAKTHROUGH IN HISTORY HAS BEGUN AS AN UNPOPULAR THEORY OF THE MINORITY

science“.

THIS IS A REALLY WORRYING TREND, because if you think about it, virtually every scientific breakthrough in the history of mankind has begun as an unpopular theory of the minority, fighting against the views of the majority. Galileo and Bruno are neither the first nor the last scholars persecuted for their beliefs.

Edward Jenner, the creator of the first vaccine in history, was initially met with skepticism and it would be 40 years before his invention was widely accepted. We can only be thankful that at the beginning of the Sixteenth century there were no social networks. Otherwise, someone named Nicolaus Copernicus would probably be stigmatized as the author of fake news. And cancelled forever.

# BACHELOR'S AND MASTER'S ADMISSIONS IN FEBRUARY 2021/2022

20  
YEARS



**VUZF**  
University of finance,  
insurance, business,  
entrepreneurship  
and innovation

We're creating  
the new business  
leaders



Become a student  
in **February**

## BUSINESS & ECONOMY

### 12 THE 8 KEY QUESTIONS OF 2022

The euro, the Green Deal, the future of travel: this year should give some of the most important answers for Bulgaria

### 16 BOARDING THE TITANIC?

The new Bulgarian government is surprisingly unanimous with the old one when it comes to eurozone membership

### 20 THE BANKS THAT COULDN'T FAIL

The euro enthusiasts believe that joining the ERM II will guarantee the future of Bulgarian credit institutions. The experience so far says otherwise

### 22 FOR PEOPLE, THERE IS NO SUCH THING AS "GOOD INFLATION"

The best policy for central banks today is to let the economy grow on its own, argues Daniel Lacalle

### 26 THE TAX RACE TO THE BOTTOM

What is the idea of a global corporate tax: redress against tax havens, or encroachment on the sovereignty of smaller and poorer countries?

### 28 THE CRISIS HAS ALLAYED FEARS OF DIGITAL SERVICES

Konstantin Velev, Chairman of the Association of Bulgarian Insurers and Executive Director of Armeec JSC

### 30 DISAPPEARING PROFESSIONS

The digital revolution will reduce the need for bank clerks, but other activities need to worry about advances in technology as well

### 32 THE DAY AFTER TOMORROW

Pension systems in Europe are under pressure due to the aging population. Is there still a chance for a "soft landing"?

### 36 5 QUESTIONS

Svetlin Nikolov, CEO of Stone Computers

## SOCIETY & POLITICS

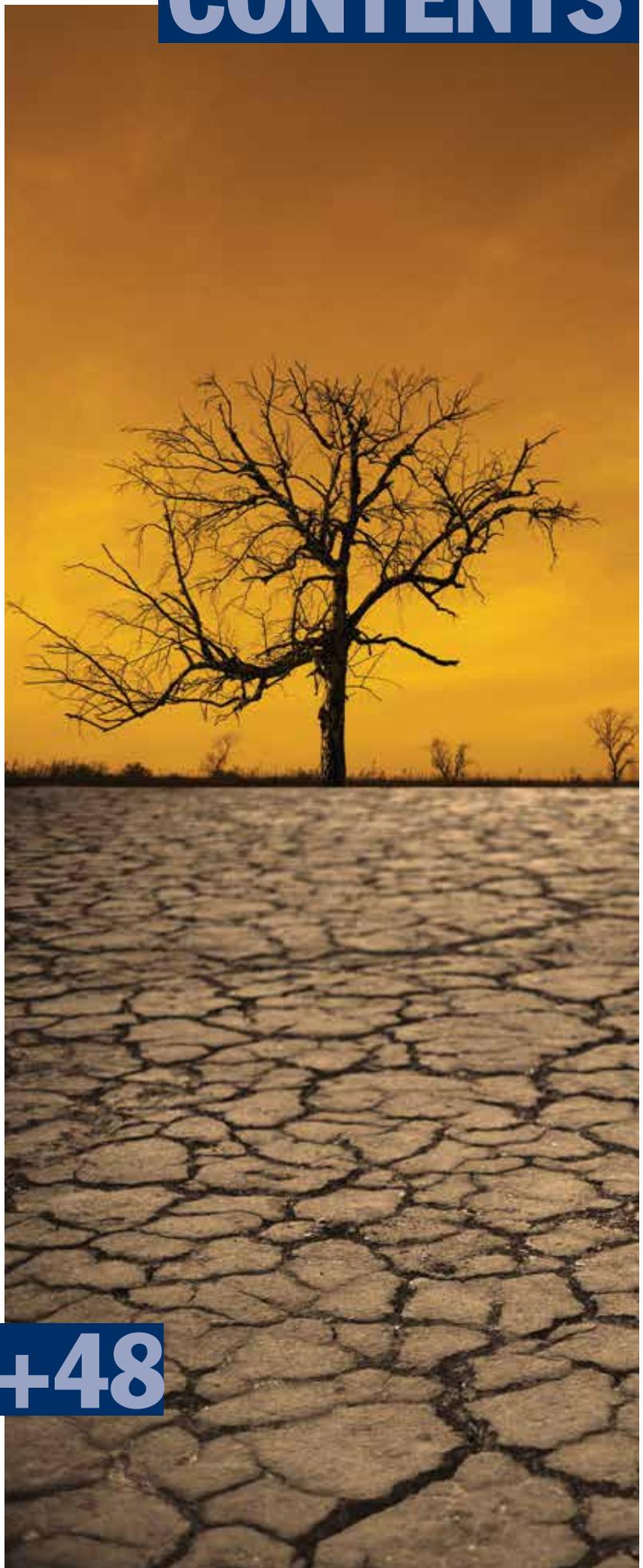
### 38 ELECTION MYTHS AND LEGENDS

Have traditional parties died already, was voter turnout really low, and should we be afraid of the Revival?

## THE BEGINNING OF THE HOT WAR

GREENHOUSE TAXES, IMPOSED BY THE RICHEST, THREATEN TO ESTABLISH A NEW DIVISION BETWEEN THE EAST AND THE WEST IN EUROPE NOT LESS SEVERE THAN THE IRON CURTAIN

# +48



# CONTENTS



**76+**

## **42 ELECTIONS THE BULGARIAN WAY**

Even before the Soviet-enforced communist rule, moments of pure democracy in this country were counted on the fingers

## **44 BULGARIA WAS LATE WITH ITS DEMANDS TO SKOPJE**

A comment by Bobi Bobev

## **46 THE EAST, THE WEST AND US**

Bulgarians frequently suffer from the fact that they are split between two civilisations. But in truth, they have much to gain from this

## **53 TRUTH OF THE HIGHEST INSTANCE**

Can tackling fake news actually bring us the worst censorship ever?

## **56 BULGARIA AND THE POST-DEMOCRACY**

Why was social democracy unable to take advantage of the financial collapse? Because it had already accepted the neoliberal financial system, and could not criticize it, argues Colin Crouch

## **58 FAKE AND 'GENUINE' NEWS**

Can traditional respected media be a greater threat to democracy than fabrication and misinformation?

## **61 THE DAY OF THE RADICAL**

It was only a matter of time before Twitter culture became Twitter politics

## **62 DIGITAL MEDIA REVOLUTION WILL ACCELERATE**

A Comment by Geetha Ranganathan

## **TECHNOLOGY & LEISURE**

## **64 FAREWELL, MY LOVELY**

Are we approaching a time when owning a car will not be affordable for most Europeans? 10 factors that push us there

## **68 THE INVISIBLE THREAT**

Microchips are the most complicated thing ever created by man and addressing the current shortage won't be fast or easy

## **72 THE GREAT GERMAN REVOLUTION**

523 hp, from Sofia to Varna on a single charge, bells and whistles from the Rolls-Royce Phantom - the new flagman from Munich is truly impressive

# **THE BEST DISCOVERIES OF 2021**

FROM THE FIRST MANNED FLIGHT ON ANOTHER PLANET TO THE SHOWER THAT USES FOUR TIMES LESS WATER: 15 PROOFS THAT PROGRESS IS FAR FROM HALTED

# WE HAVE BEEN DICTATING INSURANCE STANDARDS FOR 25 YEARS



*Together with the world's leading cybersecurity experts, Lev Ins developed the latest generation of cyber insurance products. The company is the only insurer in Bulgaria that has its **own Security Operation Center**. All our insurances include **expert assistance 24 hours a day**.*

## CORPORATE CYBER INSURANCE POLICY

for legal entities that store and process a significant amount of data.

## CYBER LEV INSURANCE

for small and medium sized companies.

## SAFE NET

for risk-free internet surfing in your home or office.

More information at [www.lev-ins.com](http://www.lev-ins.com) or **0800 10 200**



# EDITORIAL

## INVESTOR DIGEST

IN-DEPTH ANALYSIS FROM INVESTOR.BG, BLOOMBERG TV BULGARIA AND BULGARIA ON AIR

EDITOR-IN-CHIEF

**Konstantin Tomov**

ktomov@bulgariaonair.bg

TRANSLATORS

**Metodi Yordanov**

**Radoslav Genchev**

CONTRIBUTORS

**Boyko Vasilev**

**Colin Crouch**

**Daniel Lacalle**

**Dimitar Kyosemarliev**

**Geetha Ranganathan**

**Emil Ivanov**

**Ivaylo Petrov**

**Kalin Angelov**

**Kalin Nikolov**

**Peter Yovchev**

DESIGN

BRAND NEW DESIGN

PUBLISHER

**INVESTOR MEDIA GROUP**

CEO

**Victoria Mitkova**

MARKETING DIRECTOR

**Lea Bakalova**

lbakalova@bulgariaonair.bg

EDITORIAL ADDRESS

1540 Sofia, 1 Brussels Blvd.

office@bulgariaonair.bg

phone: (+359) 2 448 40 70

www.bgonair.bg

BANK ACCOUNT

IBAN: BG57 CECB 9790 1019 1023 03

BIC: CECBGB33

Банка „ЦКБ“ АД – клон Варна

ISSN 2535-0501

По смисъла на Закона за изменение и допълнение на Закона за задължителното депозиране на печатни и други произведения обн.в ДВ, бр.87 от 05.11.2010г., мажоритарният собственик на дружеството издател на списание „INVESTOR Digest“ е „Холдинг Варна АД с ЕИК 103249584. „Холдинг Варна“ АД е публично дружество по Закона за публичното предлагане на ценни книжа и е под надзора на Комисията за финансов надзор.

# CONTRIBUTORS



**DANIEL LACALLE** is the President of the Mises Hispano Institute, Professor at IE Business School, IEB and UNED, Chief Economist at Tressis SV. He was ranked among the 20 most influential economists in the world by Richtopia. Author of the bestsellers "Life In The Financial Markets" (Wiley, 2014), "The Energy World Is Flat" (Wiley, 2014, with Diego Paria), and "Escape from the Central Bank Trap" (2017, BEP)



**COLIN CROUCH, FBA** is a British political scientist, Emeritus Professor at the University of Warwick and an External Scientific Member of the Max Planck Institute for the Study of Societies. Prof. Crouch has written several books including The Politics of Industrial Relations (Fontana 1979), Post-democracy (Polity Press, 2005) and The Strange Non-death of Neoliberalism (Wiley & Sons, 2011). Previously he was Lecturer at the London School of Economics, Professor of Sociology at the University of Oxford, and curator of their Bodleian Library.



**BOYKO VASSILEV** is one of Bulgaria's most renowned television journalists, and the host and producer of the talk show Panorama (broadcast on the National Bulgarian Television). He holds a Ph.D. in sociology, is a Sofia University alumnus, and has specialized in Heidelberg, Germany. He has authored dozens of documentaries, including The Children of the Fathers, for which he received Bulgaria's 2007 Robert Schuman Journalism Award.



**GEETHA RANGANATHAN** is a senior analyst for the media sector at Bloomberg Business Intelligence (BI), covering the Advertising and Marketing, Cable & Satellite, Diversified Entertainment and, the Publishing & Broadcasting industries. Her comment on the future of media was written exclusively for Bulgaria ON AIR THE INFLIGHT MAGAZINE. Bloomberg Intelligence is Bloomberg's research arm, which provides in-depth analysis and data sets on industries, companies and government factors.

## MOUTAI

"The drink of diplomacy"

Moutai Flying Fairy is considered one of the alcohols with the longest and richest aftertaste in the world with variety of over 1200 aromatic notes. Each of the Moutai magical elixirs is a result of millennial traditions and is the perfect gift for connoisseurs and fans of exotic and refined tastes.



Sofia, 164 Vitosha Blvd.

 Moutai Bulgaria

[www.moutai.bg](http://www.moutai.bg)

# WHAT IS ACTUALLY THE POOREST COUNTRY?

"The poorest country in the EU" is a definition that almost invariably accompanies Bulgaria's name in many Western media - no matter whether their materials are about social inequality or achievements in sports, for example. But in fact, many experts have recently expressed doubts about the merit of this stigma - and now some official figures confirm their opinion. Statistically, Bulgaria still remains at the bottom of the European Union in terms of income. But dry statistics take into account neither the high share of the grey economy and unreported income, nor

the difference in living standards and purchasing power. However, those were accounted for by the economists from the Slovak Association of Socio-Economic Analysts. They surveyed the purchasing power of the average wage in the EU and several other countries. The result: the country where the average wage can buy the least goods and services is Slovakia. It is followed by Turkey. "Although the average salary in Slovakia is much higher than in countries such as Turkey, Bulgaria and Romania, comparing nominal values is not appropriate

because prices in these countries are also different," explained Jan Kosc of the association. Bulgaria has escaped last place in the EU on another indicator as well: the share of the population exposed to poverty and material deprivation. Romania is the leader here, with 35.8% of the population in such a situation, according to Eurostat. Bulgaria is second with 33.6%, third is Greece with 27.5%. Spain and Lithuania complete the top five. Somewhat surprisingly, the country with the lowest share of people living in poverty is the Czech Republic - 11.5%.

## THE CHEAPEST LAND IN EUROPE

Measured by the price of arable land, Bulgaria not only isn't the cheapest country in the EU, but does not even fall into the Top 5, according to the latest Eurostat data.

The most accessible is agricultural land in Croatia - an average of 3,440 euros per hectare, according to 2020 data. Next are Estonia, Slovakia, Lithuania and Latvia. Even in Hungary, arable land is significantly cheaper (EUR 4,893 per hectare) than in our country (EUR 5,328). However, the rest of our EU neighbours are raising the bar higher - in Romania, a hectare of farmland is already 7,163 euros - an increase of more than 2,000 euros compared to 2019. In Greece, the average price is 12,604 euros, remaining mostly unchanged in the last five years. Understandably, agricultural land is most expensive in countries with high population density and high standard of living - led



by the Netherlands, where a hectare of land costs as much as 69,632 euros. The second place goes to Luxembourg, and the Top 5 is fulfilled by Italy, Ireland and Slovenia. Bulgaria, however, gains the top spot in the comparison of prices by region. Its Southwestern region

offers the cheapest agricultural land in the entire EU: just 2,051 euros on average per hectare. The most expensive land is in the Spanish region of the Canary Islands, where scarce agricultural land is traded for a staggering 120,477 euros per hectare.

## 40 000 000

euro is the investment for the construction of a new plant for electric bicycles near Plovdiv. The factory is a joint project of the Bulgarian company Maxcom and the Austrian Pierer Group. When completed, the plant will create about 1,000 new jobs. According to data from 2020, Bulgaria is among the ten largest bicycle manufacturers in the world.

## 5-6%

inflation in 2022 is forecast by Deputy Prime Minister and Minister of Finance Asen Vassilev. According to him, the most critical months in terms of rising prices will be March and April, at the end of the heating season. Vassilev explains the high inflation partly by rising energy prices and partly by "the big money printing in the last 6-7 years".

## 5 000 000

BGN are the available funds under the microfinance program of the Bulgarian Development Bank. Startups, the unemployed, as well as entrepreneurs up to the age of 29 can apply for it. Loans of up to EUR 50,000 are granted with a long grace period and lower interest rates.

## 1915

new cars were registered in Bulgaria in November, an increase of 24% on an annual basis, according to data from the branch organization ACEA. This is in fact the largest market growth in the European Union, where most countries are experiencing declines due to the microchip crisis and supply problems. In total, 713,346 new cars were registered in the EU in November, the weakest figure since 1993, when ACEA began keeping statistics, and almost 200,000 cars fewer than in November 2020.

## 59%

of plastic waste in Bulgaria is recycled - the third-highest indicator in the European Union, according to Eurostat data. Only Lithuania

Accident between two locomotives at a small rail station in Sofia. The condition of the Bulgarian state railways should be a major source of concern for the country's new government. Especially with the huge role that rail transport has in the new EU Green Deal  
Photo by DIMITAR KYOSEMARLIEV



(70%) and the Czech Republic (61%) have a higher share of recycled plastics. Malta has the lowest share (11%), followed by France (27%) and Eire (28%). On average, 41% of plastic waste is recycled in the union. Each inhabitant of the community annually has a total of 34.4 kg of discarded plastic - 24% more than in 2009.

## 2.7%

of Bulgarians are suffering from chronic depression, according to Eurostat publication on data collected in 2019. That is the second-lowest share in the EU after Romania. An average of 7.2% of Europeans suffer from depression, and their share has increased by 0.3% in the five years since the previous similar study. The countries with the highest share of people suffering from depression are Slovenia (15.1%), Portugal (12.2%) and Sweden (11.7%). At the other pole are Romania, with only 1% chronically depressed, and Bulgaria, with 2.7%. Chronic depression, which affects women more often than men, is a serious problem globally. According to the World Health Organization, about 260 million people suffer from it.

## USB-C

The European Commission will propose a rule to unify all charg-

ing and communication cables for smartphones and other mobile devices. The idea is for everyone to use the USB-C standard in the future. For smartphones, this is already a fact for almost all manufacturers, with the clear exception of Apple, which has adopted USB-C for laptops and music players, but still sticks to its own standard, called Lightning, for the iPhone. The EC's motive is to save the need for new chargers and cables when replacing the device. Apple told the BBC that such a measure "stifles innovation rather than encouraging it."

## Best Airport

Changi Airport in Singapore is the expected winner in the 34th edition of the CN Traveler best airports survey. The new Istanbul Airport (IST), which opened in 2018, is quite close behind it. The third position is for Narita Airport in Tokyo. The top ten also includes three airports to which the national carrier Bulgaria Air operates regular flights: Athens International Airport, Zurich Airport and London Heathrow Airport, in 8th, 9th and 10th positions, respectively. The world's top ten also include Seoul Incheon Airport in South Korea, Hamad Airport in the Qatari capital Doha, Dubai International Airport and Menara Airport in Marrakech, Morocco.

## BULGARIAN MEN WORK LESS AFTER COVID. BUT NOT WOMEN

Bulgaria is one of only a handful of countries in the European Union in which the average working hours actually decreased in the second quarter of 2021, according to current Eurostat data. In most EU countries, the length of the working day has increased, mainly as a result of the easing of measures against Covid-19, which had covered the continent in the first quarter of the year. The largest increase is in Greece, where working hours have grown by an average of 18% (14.5% for men and as much as 23.9% for women). Working hours have also length-

ened significantly in Slovakia, Ireland, Portugal, Denmark and Spain. Only six countries have registered the opposite trend - from Luxembourg, where the shortening of the working day is very minimal, through Bulgaria, Estonia and France, to the Netherlands and Belgium, where working hours have decreased by several percent. Curiously enough, Bulgaria registers different trend for women and men. The fairer sex in Bulgaria actually started working 0.4% more in the second quarter, while men worked 2.7% less.



# Invest anywhere, anytime

Make investments quick  
and easy with Concord Online



- A wide variety of mutual funds
- Find us at: [online.concord-am.bg](https://online.concord-am.bg)



**CONCORD**  
ASSET MANAGEMENT

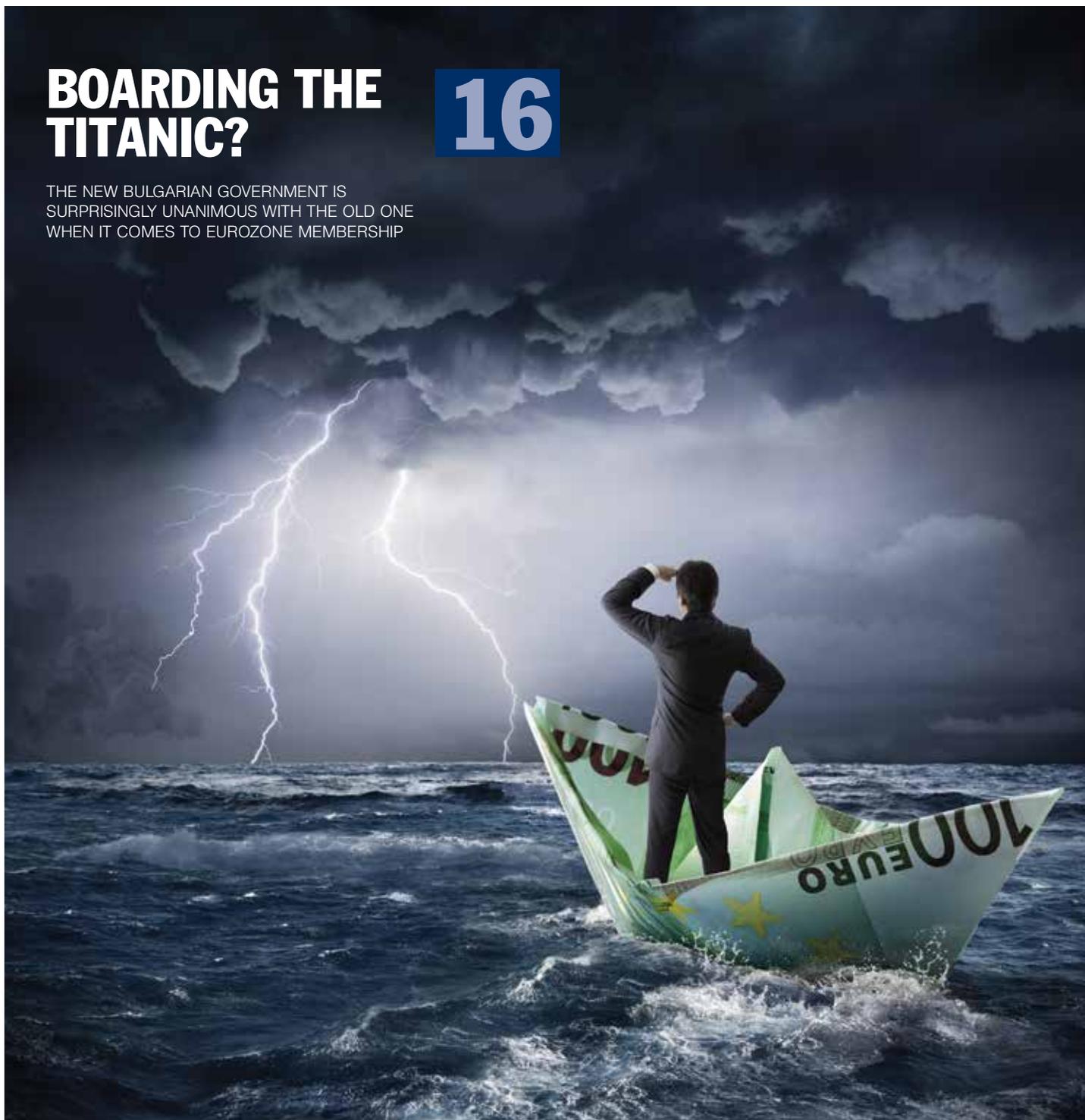


# BUSINESS & ECONOMY

## BOARDING THE TITANIC?

16

THE NEW BULGARIAN GOVERNMENT IS SURPRISINGLY UNANIMOUS WITH THE OLD ONE WHEN IT COMES TO EUROZONE MEMBERSHIP



**12** THE 8 KEY QUESTIONS OF 2022

**22** THERE IS NO SUCH THING AS “GOOD INFLATION”

**32** THE DAY AFTER TOMORROW



# THE 8 KEY QUESTIONS OF 2022

The euro, the Green Deal, the future of travel: this year should give some of the most important answers for Bulgaria

By **KALIN ANGELOV** / Photography **SHUTTERSTOCK**

“New year - new luck”, reads an old Bulgarian proverb. But 2022 exceeds our usual expectations of changing calendars. It will have to give us the answers to many key questions for the future - not only of Bulgaria but also of Europe and the planet itself. Here are the eight most important.

**WILL COVID-19 END?** This question is not too original, but it has excited everyone for two years now. For some sectors of the economy, such as tourism, which is so important for Bulgaria, another year of unpredictability and chaotic measures will come too much. Fortunately, what epidemiologists predicted back in 2020 seems to be coming true lately (albeit muffled by a powerful chorus of politicians and politicizing “experts”). That is, the coronavirus will follow the usual path in such pandemics, mutating to milder forms until the entire population of the planet encounters it and acquires some form of natural immunity. Omicron executes this scenario. Whether

Covid-19 will then disappear, or become a seasonal phenomenon like the flu, remains to be seen.

**WILL WE ACCEPT THE EURO?** Of course, this cannot happen in 2022 - the earliest possible date is the beginning of 2024. And it seems less and less likely due to the country’s impending departure from the financial criteria of the Maastricht Treaty. The new government has stated its firm intention to meet the January 1, 2024 deadline, and meanwhile to start analyzing the potential benefits and risks (if you find some contradiction between the two goals, you are not alone).



Judging by the very few sociological surveys on the subject, public opinion is rather against the replacement of the lev. There are also growing voices that the fall of the currency board with the possible arrival of the euro will free politicians to spend - something we know quite well as the "Greek scenario". The colossal indebtedness of the eurozone countries - more than 11 trillion euros at the end of last year - is also a warning signal, at least for other countries outside it, such as the Czech Republic, Hungary, Poland and Romania.

**CAN WE STAY WARM?** The drastically higher prices of natural gas and

electricity in Europe at the end of last year were mostly the result of current political factors. But starting this year, the EU's notorious Green Deal will be increasingly involved in the equation. Germany has already introduced a pilot scheme for emissions trading covering not only the industry but also domestic heating and automotive fuels. The proposal is to spread this throughout the EU. In 2022, we will find out how much of the other ideas of Brussels officials - such as eliminating coal from the energy sector - will be able to overcome the fierce resistance of countries like Poland. But in any case, it is clear that the energy transition will be fabulously expensive. EU Commissioner Frans Timmermans has reiterated that steps

must be taken to ensure that the cost of this transition is not borne solely by the poor in the EU. But at the moment it is not clear what these steps could be. Printing money to pay energy subsidies to the poor is actually to their detriment because it amplifies the already alarming inflation.

**WILL INFLATION STOP?** A decade of tireless printing of money could not help but lead to this. The Bank of England has already raised interest rates to counter, and the US Federal Reserve has announced plans to do so this year. However, nothing like this is heard from the European Central Bank, except for the "we keep watching closely" mantra This ►



► is no surprise: the ECB has simply fallen into a trap it has dug itself since 2008. The notorious quantitative easing may have been needed in the previous crisis to save the euro. But many experts believe that this policy has already outlived its benefits by 2011-2012. Now the ECB simply cannot stop, because without 'helicopter money' and record low interest rates, not only big banks but entire countries will collapse. But the bank can't go on like that if it wants to control inflation.

## WILL WE BE ABLE TO TRAVEL?

Another effect of the Green Deal that many will not like: it means an end to cheap air transport. And maybe even the end of short-haul flights. Some European countries, such as France and Austria, have already begun to phase out flights between destinations where there is an alternative connection by train shorter than two hours. There is serious pressure for such a ban to be applied at the European level - but for flights that can be replaced by a 4-hour train journey. And Greenpeace insists that the hours are moved up to six, which they say would save 3.5 million tonnes of carbon emissions a year. Thanks to the remarkable average speed of the Bulgarian State Railways, the flights Sofia - Varna and Sofia - Burgas are not endangered so far. But the trend is clear.

## WILL WE BENEFIT FROM THE NEW SUPPLY CHAINS?

International transport prices will inevitably rise in the coming years. But even if that were not the case, the current supply system now seems too long, complex and vulnerable - as incidents such as the Ever Given container ship blockade of the Suez Canal have convincingly shown. Most large international manufacturing companies have already begun to review their models and look for ways to shorten the supply chain. This, in theory, gives excellent opportunities to a country like Bulgaria, literally at hand from the major production bases in Europe. Whether we will be able to take advantage of the rearrangements depends largely on the long-awaited reform of the judiciary system - this is the only way to handle foreign investors' current lack of trust.

## WILL THE PROPERTY BUBBLE BREAK?

Many people in the real estate sector claim that homes in Bulgaria are still undervalued, and apply examples with prices from the capitals of other countries in Southeast and Central Europe. But a compelling counter-argument is the existing gap between house prices and rents. There is also no demographic factor to justify further appreciation: in a rapidly melting nation, the market is driven mainly by urbanization in the direction of



Another effect of the Green Deal that many will not like: it means an end to cheap air transport. **And maybe even the end of short-haul flights.**

Sofia and two or three other major cities, but it has also been slowing down recently. For many savers, the properties are a haven from record low interest rates. But whether interest rates can remain so for long is highly questionable.

## WILL WE CHANGE EDUCATION?

Bulgaria does not have many resources, and its population is declining. The only way to economic growth and catching up with European incomes is in high value-added industries - and they require well-educated people. For two decades now, the educational reform in Bulgaria has remained an imitation of activity rather than something really transforming. And time is running out: in the next few years, nearly half of the country's teachers will retire, with no clear prospects of who will replace them. Only the urgent announcement of education as a top priority of the government can tip the scales and restore the prestige of educational institutions. ■

6 years

# Bloomberg TV Bulgaria

WE FIND BUSINESS IMPORTANT

[bloombergtv.bg](http://bloombergtv.bg)





# BOARDING THE TITANIC?

**The new Bulgarian government is surprisingly unanimous with the old one when it comes to eurozone membership**

By PETAR YOVCHEV / Photography SHUTTERSTOCK

“The more things change, the more they stay the same”: we can not help but recall the aphorism of the great French journalist Alphonse Karr, as we observe the strange continuity between the last Bulgarian governments on the country’s membership in the eurozone. The coalition, which backed Kiril Petkov’s government, was sewn together with a single thread that united its four constituent parties: the promise to break with the models imposed by Boyko Borissov’s previous cabinets. Petkov’s party holds this promise in its own name: “We continue the change.” But on the subject of the euro - one of the country’s most important decisions - the new government is touchingly unanimous with the old one.

**THE COALITION AGREEMENT LISTS** in black and white the goals for the euro:

- “MoF and BNB to prepare an analysis of the benefits and negatives of the introduction of the euro in Bulgaria, which will be the basis of a large-scale awareness campaign one year before joining the eurozone...”;
  - “Joining the euro area with an irreversibly fixed exchange rate of BGN 1.95583 per euro without allowing deviations from it in any way”;
  - “Entering the euro area as soon as possible”.
- If you see something schizophrenic in the thinking set out in these three goals, you are not alone. Coalition partners acknowledge that an analysis of the possible benefits and harms of the euro has not yet been made, and are com ▶



mitted to correcting the gap. So far so good. But at the same time, they agree to “join the eurozone as soon as possible.” So the analysis doesn’t matter. Whether the benefits are greater or the harms, the course of action is set. What demands such rush, is not entirely clear: the new government, like the old one, has not put forward any concrete arguments.

**HOWEVER, BULGARIA’S HASTE IS IN STRONG CONTRAST** with the cautious approach of the Czech Republic, Hungary and Poland, which at this stage have no intention of moving closer to the eurozone (not to mention Denmark and Sweden, which abandoned it in referendums). It is in stark contrast even with neighbouring Romania, which in 2018 had slightly accelerated the process of advancing to the single currency, but has now abruptly halted it. In December, the government in Bucharest confirmed that it was postponing its calendar for joining the eurozone until 2029 at the earliest.

Thus, the only other candidate for monetary union remains Croatia. But if we compare Croatia and Bulgaria, the two countries are like mirror opposites:

- The Bulgarian lev, thanks to the currency board, is pegged to the euro and this virtually eliminates currency risk. While the kuna is not, and the central bank in Zagreb has had to resort to costly market interventions more than once to control the exchange rate;
- In Croatia, the share of tourism in GDP was as much as 25% in 2019, mainly with tourists from destinations using the euro. In Bulgaria, the share of tourism in GDP is about 11%, and the majority of tourists are from non-euro destinations;
- In Croatia, the so-called “euroisation” of the economy - that is, the share of loans and deposits made in euros - is about twice as high as in Bulgaria;
- Finally, but not least, Croatia has a large public debt - 87.5% of GDP, while in Bulgaria it is only 24.7% (at the end of the second quarter of 2021).

In other words, none of the arguments that Croats have for wanting the euro is valid for Bulgaria.

**THERE ARE A HANDFUL** of arguments put forward by the supporters of the euro in our country, of course, but they have been heard less and less lately. Let’s remind them:

- **The adoption of the euro will lower interest rates.** First, the effect of globally low interest rates has long since reached Bulgarian banks. And secondly, it is very debatable whether excessively low interest rates are a plus. They stimulate the inflation of dangerous bubbles, for example in the real estate sector, and also



## The government in Bucharest confirmed that it was postponing its calendar for joining the eurozone until 2029 at the earliest

artificially support the lives of so-called “zombie” companies, which would otherwise be wiped out by the competitive environment.

- **The adoption of the euro will raise the country’s credit rating.** This is probably true in the short term. But in the long run, the rating depends on the policy pursued, not on eurozone membership. Countries outside the euro, such as the Czech Republic and Poland, have a significantly higher rating than countries inside such as Italy, Portugal, Greece and Cyprus.

- **The adoption of the euro will stimulate trade.** There is no evidence to support such an effect. In fact, Ashoka Modi, a professor at Princeton University, says the opposite: that the adoption of the euro has reduced trade between Germany and Spain, while trade between Germany and non-eurozone countries such as the Czech Republic, Hungary and Bulgaria is growing.

- **The euro will stabilize the banking system.** This is, to put it mildly, ridiculous. The banking system in Bulgaria is conservative, overcapitalized and much more stable than the banking systems in the euro area. The KTB scandal in 2014 was rather politically stimulated, while numerous banking scandals in the eurozone - from the Spanish Santander, through Danske Bank and a whole galaxy of Italian banks

to Deutsche Bank - spoke of systemic weaknesses.

- **The euro will guarantee the European future of Bulgaria.** Also a hollow argument. Bulgaria made its civilizational choice with its EU and NATO memberships. Whether or not to join the monetary union, is not a geopolitical question. Denmark, Sweden and the Czech Republic are no less European countries because they use their crowns. Nor would anyone question the civilizational choice of Switzerland, which is not even a member of the EU.

**ALL THESE “IMAGINARY” PROS** from the euro do not sound convincing in today’s situation, and probably that is why they are less and less mentioned lately. Instead, Euro-enthusiasts have a new trump card: that eurozone membership would give Bulgaria access to more serious financial support in crises like the one with Covid-19.

This is an extremely interesting argument. Simply because, if we look at it in detail, it actually works in the opposite direction (as one comedian used to say, “you don’t need enemies with friends like that”). There are three inevitable objections to the thesis of greater and safer help. The first is that the European Stabilization Mechanism (ESM), which is the main instrument



## GOVERNMENT DEBT TO GDP

Country	2009	2012	2015	2018	2020	% 2009-2020
<b>Non-Eurozone Countries</b>						
BULGARIA	13,7	16,6	25,9	22,1	24,7	11
Croatia	48,4	69,4	83,3	73,3	87,3	38,9
Czechia	33,4	44,2	39,7	32,1	37,7	3,3
Denmark	40,2	44,9	39,8	34	42,1	1,9
Hungary	78	78,1	75,7	69,1	80,1	2,1
Poland	49,8	54,4	51,3	48,8	57,4	7,6
Romania	21,8	37,1	37,8	34,7	47,4	25,6
Sweden	40,7	37,5	43,7	38,9	39,7	-1
<b>Eurozone Countries</b>						
Belgium	100,2	104,8	105,2	99,9	112,8	12,6
Estonia	7,2	9,8	10,1	8,2	19	12,2
Finland	41,5	53,6	63,6	59,8	69,5	27
France	83	90,6	95,6	97,8	115	32
Germany	73,2	80,7	72	61,3	68,7	-4,5
Greece	126,7	162	176,7	186,4	206,3	79,6
Italy	116,6	126,5	135,3	134,4	155,6	39
Netherlands	56,8	66,2	64,6	52,4	54,3	-2,5
Slovakia	36,4	53,6	51,8	49,6	59,7	23,3
Spain	53,3	86,3	99,3	97,5	120	66,7
Euro Area 19	80,2	90,6	90,8	85,5	97,3	17,1

for providing such assistance, remains painfully underfunded. In this situation, the main option for support is through a new printing of money - a pro-inflation policy, which is at the root of the current difficulties of the euro area.

The second objection is rather in the form of a question. Even if Bulgaria is a member of the eurozone, who is more likely to need rescue - a country like it, with just about 15 billion euros of public debt (below 25% of GDP), or countries like Italy (2.7 trillion euros of debt, 156 % of GDP), France (2.76 trillion euros, 115%), Spain (1.42 trillion euros, 123%), Portugal (277 billion euros, 135%), Belgium (547 billion euros, 114%), Cyprus (25 billion, 112%)? The total public debt of the euro area countries is 11.6 trillion euros. The total public debt of non-euro area EU members is only about 1 trillion.

**BY THE WAY**, according to some skeptics, Bulgaria's still low public debt is the main motivation of the local political elite to be greedy for the euro. Currently, the currency board is curbing the natural desire of politicians to spend. With the eventual entry into the eurozone, this obstacle will disappear. Greece, which had a debt-to-GDP ratio of just over 90% on the eve of the introduction of the euro, and over 160% a decade later, is a good illustration of the risks.

The total public debt of the euro area countries is 11.6 trillion euros. The total debt of non-euro area EU members is only about 1 trillion.

It is interesting to note that after another decade of austerity and externally imposed debt management measures, the ratio is already 207% in mid-2021, and Greece's net public debt exceeds 354 billion euros - or 3,421 euros per every man, woman and child in the country. However, Greece is not the riskiest factor. In the eurozone, as mentioned, there are countries with incomparably higher debt mountains. These are countries that, as the ECB joked at the time, are too big to bail. This probably explains the reluctance of the European Central Bank to even mention the possibility of raising interest rates - a step that the Bank of England has already taken to counter inflation, and which the US Federal Reserve announced as its intention for next year. However, a similar measure from Frankfurt could be the turmoil that would overthrow the dominoes in the eurozone. Should Bulgaria be among its tiles at this very moment? This is the question that the government and the Bulgarian National Bank must analyze before setting "urgent" goals. Because, in fact, there is nothing urgent: membership in the eurozone will not escape us. It is written as a commitment in our accession treaty to the EU. But it would be good to happen when not only Bulgaria is ready for the euro, but the euro is ready for Bulgaria as well. ■



# THE BANKS THAT COULDN'T FAIL

The euro enthusiasts believe that joining the ERM II will guarantee the future of Bulgarian credit institutions. The experience so far says otherwise

By PETAR YOVCHEV / Photography SHUTTERSTOCK

On July 13, 2020, the Bulgarian lev became part of the Exchange Rate Mechanism (ERM II), also known as the eurozone's waiting room, while on October 1, Bulgaria officially became part of the so called banking union, meaning its main banks will fall under the European Central Bank's (ECB) direct supervision.

The former Bulgarian government underscored a single argument in support of its sudden rush - that the eurozone waiting room and the banking union will lead to a more reliable supervision of Bulgarian banks. Or, like the ex-prime minister Borissov said, the banking union "guarantees that even if (former economy minister Rumen) Gechev and (former prime minister Plamen) Oresharski return, no banks will ever fail". According to Borissov, the resistance against the euro came from "oligarchs" who are afraid of the ERM II and that they will not be able to break banking laws so easily and have banks fail, as the banking union translates into discipline, control and guaranteed finances.

**THIS ARGUMENT HAS EVEN LESS WEIGHT** than the silence that was prevailing until now, simply because banks in the eurozone can and do fail. The European supervision cannot prevent this, nor is there someone sitting in Frankfurt with bags full of cash ready to rescue the banks. Actually, the fabled Single Resolution Mechanism (SRM), created after the last big economic crisis in order to help troubled banks, has been so far activated successfully just

once, and that was by coincidence.

The idea itself that banks must be rescued at any cost is obviously ridiculous. Such a credo would only unnecessarily reassure bank managers and encourage them to take irresponsible risks, because should things go south, the state and the ECB will rescue them. The goal of the single European supervision has never been to prevent bank failures, but to merely ensure that their effects are limited and do not spread to the whole banking system.

**THE MORE RELIABLE SUPERVISION IN EUROZONE** countries is yet another such myth. The supervisory bodies' omissions there are so many that listing them would take up the whole article. A relatively recent example is Austria's Commercialbank Mattersburg, which collapsed in mid-July 2020. It turned out that this small regional bank had 500 fake accounts and "made up" assets worth EUR 688 million (given its total assets of EUR 800 million). The bank's chief Martin Pucher admitted to systematically syphoning funds, including towards backing the local football team SV Mattersburg, of which he was the president. Another part of the syphoned money went for generous gifts to local political dignitaries. State councilor Christian Illedits already resigned after it transpired that he had received a 100-gram gold bar for his anniversary from Pucher. Other politicians, including mayors of larger cities in the region, have been singled out by Pucher as recipients of similar "souve-



nirs". They are denying any involvement for now.

A few local large companies will lose deposits in the amount of EUR 25-30 million (the deposit guarantee fund only covers up to EUR 100 000. What's most disturbing is that the bank has undergone two probes by Austria's Financial Market Authority (FMA), which found nothing wrong. The balance gap was discovered thanks to a whistleblower. Prof. Claus Staringer of the Freshfields Bruckhaus Deringer law firm notes that the problems are yet to come and will be related to finding out what the bank's true financial results had been throughout the years. Since 2010, Commercialbank has declared profits ranging from EUR 3 million to 5.5 million euro and has paid between EUR 1 million and 2.3 million. The Austrian legislation does not allow the Exchequer to collect taxes on non-existing profits, meaning that the state will likely have to return some of these millions.

Of course, the case here is not about SRM intervention, as this is to be resorted to only when it comes to the biggest banks or those in systematically critical condition, while Commercialbank falls in neither category. Bulgaria's Corpbank, which was declared insolvent in 2014, would not qualify either.

**THE THING IS THAT THE SRM RARELY WORKS FOR BOTH** critical and vital banks. In recent years there have been plenty of examples of banks from this chosen group, which



It is no wonder that many experts describe the SRM as non-working. Some, like the INSEAD Professor Jean Dermine, even dared to describe it as malicious and “creating instability”

have been qualified as failing or likely to fail by the European supervision. Not a single one of them has received funding from the Single Resolution Fund and just one bank has been restructured through the SRM, the only reason being that a buyer had emerged before Frankfurt’s intervention.

This is the time to recall how the European supervision works. First, the ECB declares a certain bank as failing or likely to fail. One or more of these four conditions must be met before that happens:

- the bank no longer fulfils the requirements for authorization by the supervisor;
- the bank has more liabilities than assets;
- the bank is unable to pay its debts as they fall due;
- the bank requires extraordinary financial public support, but some exceptions are allowed here.

**ONCE THE ECB PRONOUNCES ITSELF, THE SINGLE RESOLUTION BOARD (SRB)** will have to decide whether there are any alternative solutions from the private sector or at the supervisory level. If not, then the board will have to decide whether restructuring the bank is in the public’s interest. If that’s the case, it would propose a restructuring plan. If not, the bank would be liquidated under the relevant national insolvency legislation. Here’s a list, however, of how some similar cases really played out since the SRB’s introduction in 2016:

- Banca Popolare di Vicenza of Italy, declared failing or likely to fail by the ECB in June of 2017. The SRB decided that its restructuring is not in the public’s interest.

- Veneto Banca of Italy, declared failing or likely to fail by the ECB in June of 2017. The SRB decided that its restructuring is not in the public’s interest.

- Banco Popular Espanol of Spain, declared failing or likely to fail by the ECB in July of 2017. The SRB adopted a restructuring scheme that provides for selling the bank to Banco Santander S.A.

- ABLV Bank of Latvia, declared by the ECB failing or likely to fail in February of 2018. The SRB decided that its restructuring is not in the public’s interest.

- AS PNB Banka of Latvia, declared by the ECB failing or likely to fail in August of 2019. The SRB decided that its restructuring is not in the public’s interest.

In short, these are five cases so far, of which the restructuring board has washed its hands by throwing the ball back to the national regulators’ court. The only exception is the Spanish Banco Popular, but its restructuring through the sale for EUR 1 to Banco Santander can hardly be credited to the SRB - Santander’s interest was declared in April, which was before Banco Popular even found itself in dire straits. As far as the two Italian banks go, the SRB decided that their rescue is not in the public’s interest, despite the

fact that the Italian public had already poured around EUR 3.4 million into them through the state financed Atlante fund.

**THERE’S ONE MORE STRIKING EXAMPLE**

**LEFT** from an Italian bank, considered to be the oldest in the world - Monte dei Paschi di Siena. It passed the ECB’s “realistic” stress test scenario, prompting Frankfurt to deem it not likely to fail. The adverse stress test scenario, however, found a capital shortfall of EUR 5 billion, which was later revised to EUR 8.8 billion. Italy’s then economy minister Pier Carlo Padoan politely asked for an explanation for this revision, which he is still waiting for. The Italian State was forced to rescue the bank with around EUR 9 billion of taxpayers’ money.

Given this experience, it is no wonder that many experts describe the SRM as non-working. Some, like the INSEAD Professor of Banking, Jean Dermine, even dared to describe it as malicious and “creating instability”. He claims that the SRM in its current form is incomplete and a potential contributor to future panic and disruption in the banking system.

Or to be straightforward, the ERM II and the banking union will not be the island of tranquility and carelessness that some politicians described. To the managers of those banks and the local supervision, exercised by the Bulgarian National Bank, they will be rather seen as something else to be on the lookout for. ■



# COMMENT

## FOR PEOPLE, THERE IS NO SUCH THING AS “GOOD INFLATION”

The best policy for central banks today is to let the economy grow on its own

By DANIEL LACALLE / Photography SHUTTERSTOCK



During the recovery from the current crisis, it is particularly dangerous to see that emerging economies are lagging behind significantly. Usually, in previous crises, emerging markets came back very, very fast, in Latin America in particular. This time, it's quite different. I think the massive level of stimulus packages that was implemented is also showing the big disparities between the developed economies. So I'm concerned about that path because we will see that China and the United States are going to fully recover the GDP lost in 2021. However, many economies are not going to recover even in 2024.

### THE BEST POLICY IN THIS ENVIRONMENT

is to let the economy start functioning on its own. We have implemented very large stimulus packages for the pandemic, which was absolutely acceptable, and very big increases in money supply. But from now on what you need to do is to let the private sector recover faster by letting job creation be at the forefront of policy. That is difficult. Governments are very reluctant to reduce stimulus packages and believe that they

need to continue to increase debt and deficit spending. The other very important factor for the recovery is that we need to have a global approach to vaccination. So far, the vaccination process is one of the drivers of this disparity in the improvement of the economy.

### FURTHER, THE RISE OF INFLATION

is very negative for the recovery, especially for the recovery of lower-income households. We have seen food prices rise to record highs in an environment, where most households still have 10 - 20% lower income than they had two years ago. So inflation is a big component of this risk because it leaves a lot of the poorer people behind. The inflation rate which central banks considered to be modest is actually quite significant for the people in the lower income brackets. And this is not a temporary phenomenon. More importantly: we don't know what temporary means. Temporary could be three years and obviously, that would make a big impact on the lower income families. We saw from protests all over Europe, already before

COVID-19, against the rising cost of living. And now this is a larger problem. Inflation rates in both the Eurozone and the US will come significantly above the target of 2% level, maybe 3%. But 3% headline inflation rate means fresh food prices going up 5-7%, rent going up between 3 and 5%. 2022 will see some moderation in that inflation rate. However, the prices of the non-replicable goods or services, the prices of the things that we purchase on a daily basis, are likely to remain unchanged from the 2021 high levels.

### BUSINESS DOES NOT HAVE A LOT OF MARGIN

to take on board the increase in producer prices. They need to pass those costs to consumers because margins are not rising and they were very weak already in 2019, particularly the European Union. So I think that the rise in prices of copper and industrial commodities in general will be transferred to the final prices of goods and services. And I don't think that any consumer in the world sees good inflation. We need to measure inflation not just on its own but relative to real disposable income and real wages.



to start warning markets that rate hikes will happen when inflation starts to creep up and at full employment or at least the level of unemployment that we have pre-pandemic level is reached. It's very much about what we saw in the past: telling people, telling investors that there will be a path of rate hikes, and that there will be a part of normalization of asset purchases in order to allow the market to be at least adequately informed about the policy of central banks. Right now, central banks are being very obscure about their targets. They say that they can act whenever it is needed but they're not giving a clear path. So they need to give a clear path so that we don't create what we all remember - the taper tantrum.

The risk of massively inflating the financial sector is very far behind us. It's already happened and central banks are not reacting to very elevated levels of valuation. For example, of high risk bonds. So the impact is, obviously, that a very modest reduction in the pace of asset purchases of central banks can create a very large ripple effect in the economy, and that a small change in the financial conditions of the market can create a big impact on the real economy. So, the transmission mechanism of monetary policy has to be monitored a lot more in detail.

## THE NEW MONETARY THEORY CANNOT OFFER

a solution to get out of these unprecedented fiscal stimulus and inflated balance sheets of central banks. It's the opposite actually. 'Modern monetary theory' is not modern, and it's not a theory. In Europe - in Bulgaria, Spain, Italy, Greece - we have lived this before. Destroying the purchasing power of the currency is not a solution for the economy and printing money to finance government spending at any cost does not solve it. If modern monetary theory worked, we wouldn't have had the economic disasters of the French Revolution, of the Roman Empire, of the Weimar republic, of Argentina, of Venezuela. The solution to a problem of high liquidity and low interest rates is not to make the mistake larger.

Nonetheless, we will continue to see a level of fiscal support that is not normal in the way in which we have seen fiscal support in the past, because the level of government spending that increased in 2020 is very unlikely to come down to pre-pandemic levels even in a growth environment. A lot of the programs that were implemented are simply not going to be fading out anytime soon. We will see a level of fiscal support in the economy that is probably more similar to what we saw in periods of crisis than in a period of recovery. ■

Real wages are not growing. The problem that policymakers find themselves in, is that the idea that you can allow the economy to overheat, but that will not generate negative side effects, might sound interesting on paper, but it's impossible. If the economy overheats because of massive government spending, massive increase in the money supply, it is inevitable that the negative consequences will be for lower-income families, even with the increase of transfers from governments. So it's a very difficult choice. Governments, on the one hand, think that they need to continue to push for economic growth at any cost, but "any cost" means reduction in purchasing power of the currency.

**THE PROBLEM WITH CENTRAL BANKS** is that they're caught between a problem and a bigger problem. What is the first problem? Inflation. What is the bigger problem? The bigger problem is, that virtually no sovereign bond issuer, no government can tolerate an increase in yields. Therefore, Central Banks need to continue to purchase bonds of sovereign issuers, even in an environment,

in which the recovery is strong and that generates a bigger concern about the rise of inflation. So central banks need to stick with the message that inflation is going to be temporary. But the problem is that the market reacts - and the market is already reacting. We are seeing that commodity prices continue to rise. We are seeing that the sovereign bonds are starting to underperform relative to equities. And that the equities there are more inflation-linked are outperforming those of the growth. So the market is already more invested and understanding that the situation with inflation is likely to be more persistent than what central banks believe.

**CENTRAL BANKS NEED TO FIND THREE THINGS** happening at the same time. The first thing is that inflationary pressures are modest, the second is that employment is coming back to the pre-pandemic level. The third is that economic growth and credit growth remain ample despite the possibility of a rate hike. For central banks, right now it's more about communication than about policy. They need

# FINTECH: THE NEW DNA OF FINANCIAL SERVICES

By Ivelina Kavurska, Director of Strategic Projects and member of the Management Board of MFG



*Ivelina Kavurska has been part of the Management Financial Group (MFG) since 2014. She started working with the group as a lawyer and over the years has held various management positions in the companies Easy Payment Services, iuvo, ACOD. As Director of Strategic Projects and a member of the Management Board of MFG, she is an integral part of the group's most courageous and large-scale initiatives. She holds a master's degree in law from the University of National and World Economy. MFG is a 100% Bulgarian group of companies whose mission is to provide easy access to finance for everyone regardless of their current social and financial condition. Some of the companies in the group have been operating on the Bulgarian market for over 16 years. MFG is active in six countries: Bulgaria, Romania, Ukraine, Poland, Spain and Northern Macedonia, and plans large-scale geo-expansion in key European markets and at least one other continent as early as 2022. The main focus of MFG is to offer financial and credit products for individuals and small and medium-sized businesses. The group's portfolio includes companies and brands such as Easy Credit, Biala Karta (White Card), Viva Credit, Fintrade, ACOD, Violeta, the P2P platform iuvo, the BNPL model NewPay, the personal finance management app Rilla, the app for mobile payments Settle, etc.*

The world of financial services is becoming increasingly digital, virtual, and new fintech startups are gaining ground in spaces dominated by traditional banks. The list of technology pioneers of the World Economic Forum for 2021 is a collection of 100 companies in the early stages of growth that have the potential to influence their industries. These are startups that shake up data and cybersecurity, pave the way for blockchain and digital assets, innovate in IoT and smart cities, and develop the factories of the future. We are witnessing the emergence of new currencies, technologies, business models and forms of transactions - all in

an environment of global economic turmoil and increasingly comprehensive regulation. The most significant change is the arrival of new players - non-bank financial institutions (NBFIs), which bring with them a wave of innovation and turn whole market models upside down. Digitalization is making waves, driven by the growth of e-commerce - first in B2C (and especially through BNPL models), and now in B2B. With it comes continuous innovation to meet the demand for technologies that drive efficiency and lower transaction costs and increase convenience.

The trend towards digitalization and technological innovation is transforming the financial services - from deposits, payments, investments to loans. In different corners of the financial industry, all these developments have improved interoperability, simplicity and added value. One of these areas that has undergone a radical change is payments with innovators such as Apple Pay / Samsung Pay, Paypal, M-Pesa, Alipay, Payoneer, - revolutionizing the way we expect to make and receive (instant) payments for products and services.

#### The upcoming stages

In revolutionizing and fragmenting the payments, newcomers are disrupters of the establishment and are competitors of traditional banking models. Does this make fintech technology and digital ecosystems an enemy?

These moves are just the beginning of a longer cycle of digital structural change. In line with this cycle, competition will soon be fiercer for both fintech digital ecosystems and traditional banks. Indeed, one in three startups is likely to survive its first four years, and banks will begin to disappear in the coming years.

Banks face increasing competition and realize that innovation (especially around the suitability of solutions, flexibility and time to market) is crucial if they want to maintain their positions in the market. But as customer requirements and expectations in uX continue to grow, it will become increasingly difficult for banks to meet all customer needs.

And as new players (NBFIs) begin to defeat traditional slow banking methods, the landscape will become much more hostile to all players. For fintech companies, the next decade will bring greater market consolidation as digital ecosystem giants overtake, absorb or hinder start-ups that cannot compete.

Smartphones, digital payment cards and point-of-sale terminals are expected to increase the value of the global mobile payments market from \$ 3.71 trillion in 2019 to \$ 12.4 trillion by 2025 at annual rate of growth of 23.8% over the next five years. ResearchAndMarkets.com makes this assessment in a report, adding that in addition to the previously mentioned technological developments, government initiatives also stimulate market growth.

Partnerships between regulated institutions and fintech are already well established and known in the B2C (business to consumer) space. Many banks, for example, have created

technology “accelerators” or “incubators” to seek early access to fintech innovation, regulators are developing so-called “Sandboxes”. Advances in fintech in the field of B2B are still at a relatively early but very promising stage, with relative momentum driven by various complexities around the user experience and the potential for cost savings. However, the B2B sector has even greater potential than retail advances so far, with online sales projections for B2B revenue in 2021 doubling these B2Cs. This will enable the BNPL models to thrive even more and all of us as consumers are anticipating it.

**BNPL is the “win-win” fintech revolution of our decade**, which is yet to enter the markets in its full potential in the SEE. Imagine the convenience of online purchases that is offering a deferred payment at zero price. Online merchants are selling full baskets at a better price at the same time.

Let’s take an example with high-end makeup brand with audience is aged 18-24. An integrated BNPL provider will so prominently develop user journey. Arriving on a product page you’ll see the BNPL proposition displayed just below the price tag clickable with one tap only: break down your purchase into three payments, with no fees. Who can resist it!?

#### Still the regulatory burden

is well known and perhaps the biggest obstacle to investing in financial innovation. The necessary prioritization of compliance means that investments are poured into mandatory updates to meet new standards for reporting, anti-money laundering, anti-fraud and customer knowledge requirements - such as FATF recommendations or EU directives in the field of AML and payments. The current due diligence has increased operating costs and new capital adequacy rules to keep higher levels of capital in the institutions’ balance sheets; further diversion of money away from innovation. In combination with the low interest rate environment and the requirements of investors regarding the return on equity, the costs of doing business in financial technologies are increasing, in turn, the already thinning margins are shrinking.

Two of the biggest challenges facing fintech technologies - especially in the B2B market - are access to a sufficient customer base and the ability to successfully scale a functioning solution for mass use. Although agile and innovative, these B2B startup technologies often lack the necessary global reach, processing infrastructure, funding opportunities and customer knowledge, and experience to turn a sought-after market solution into a viable tool for long-term growth.

#### Financial technology future vision

- **Effective** and real time - processes to be streamlined “as a set” and to be instant up to a second on cash flows.
- **Available**, integrated and flexible loans - a



one-stop shop with seamless coordination, a- channel convergence and access to multiple device services (both online and offline) through a consistent, easy-to-use and instinctive interface with clean, modern aesthetics.

- **Individual**, intuitive and relevant. BNPL capacity for customized products in line with improved data analysis, which can more clearly define user profiles.

Given that a start up is capable of the above, then it will have very good chances of becoming the next Unicorn.

#### The treasure trove of the future

A beautiful example set in the “FinTech 2.0: Creating new opportunities through strategic alliance” - imagine the following scenario: a CEO on the street in Sofia enters his payment portal through an application on their mobile device. He has a real-time overview of all their money positions and can see that the delivery of an order has been accepted and paid for in Kenya via m-POS, with an integrated FX module. The payment portal analyzes data and warns of a potential short-term jump in demand for their product in Asia. It also offers the best potential for funding for further production and sales; an offer the CEO can accept at the touch of a button. The payment provider, which previously had to ask for years of historical (perhaps unstructured) data, can now see the accounting and ERP systems, make an immediate credit risk assessment and offer them appropriate financing at the moment.

This seamless and integrated picture is the future of B2B technology - and it is the emanation of fintech with a strategic growth plan that includes a lender as a partner and ally who will be in the best position to design, offer and maintain payment components that produce such digital connectivity.



# THE TAX RACE TO THE BOTTOM

What is the idea of a global corporate tax: redress against tax havens, or encroachment on the sovereignty of smaller and poorer countries?

By **KALIN NIKOLOV** / Photography **SHUTTERSTOCK**

The key to successfully introducing new taxes, or preventing them, is finding the right phrase. At one time, Republicans in the United States thwarted the Democrats' new inheritance tax, calling it the 'death tax'. Now US Treasury Secretary Janet Yellen is presenting her plans for the introduction of a minimum global corporate tax rate as 'a 30 year race to the bottom'.

Proponents of these plans see them as a way to ending offshore tax areas and the tendency for large corporations to pay less and less to society. But these plans have opponents who also have access to impactful phrases. For them, the introduction of a global corporate tax is just another attempt by rich and strong countries to take away the freedom of the poor and weak. What is the essence of the dispute, and where is Bulgaria in it?

The idea of introducing a profit tax single minimum rate, applicable to all countries in the world, is not new. In the Organisation for Economic Co-operation and Development, it has been discussed for eight years as the BEPS (from 'base erosion and profit shifting') initiative. The difference between its plans and Yellen's is mostly in the size of the rate: while the OECD is discussing something in the range of 10% to 15%, the US Treasury Secretary is

pushing for a 21% minimum global rate. Coincidentally, this is exactly the amount of corporate tax in the United States at the moment, after Donald Trump lowered it from the previous 35% in 2017. Now President Biden intends to raise it again not to the previous levels of Obama's term, but 'only' to 28%.

**BY THE WAY, BIDEN HAS NO CHOICE** if he wants to implement his grand plans for infrastructure construction and promotion of the green economy. These plans are estimated at USD 2.25 trillion, which must still come from somewhere.

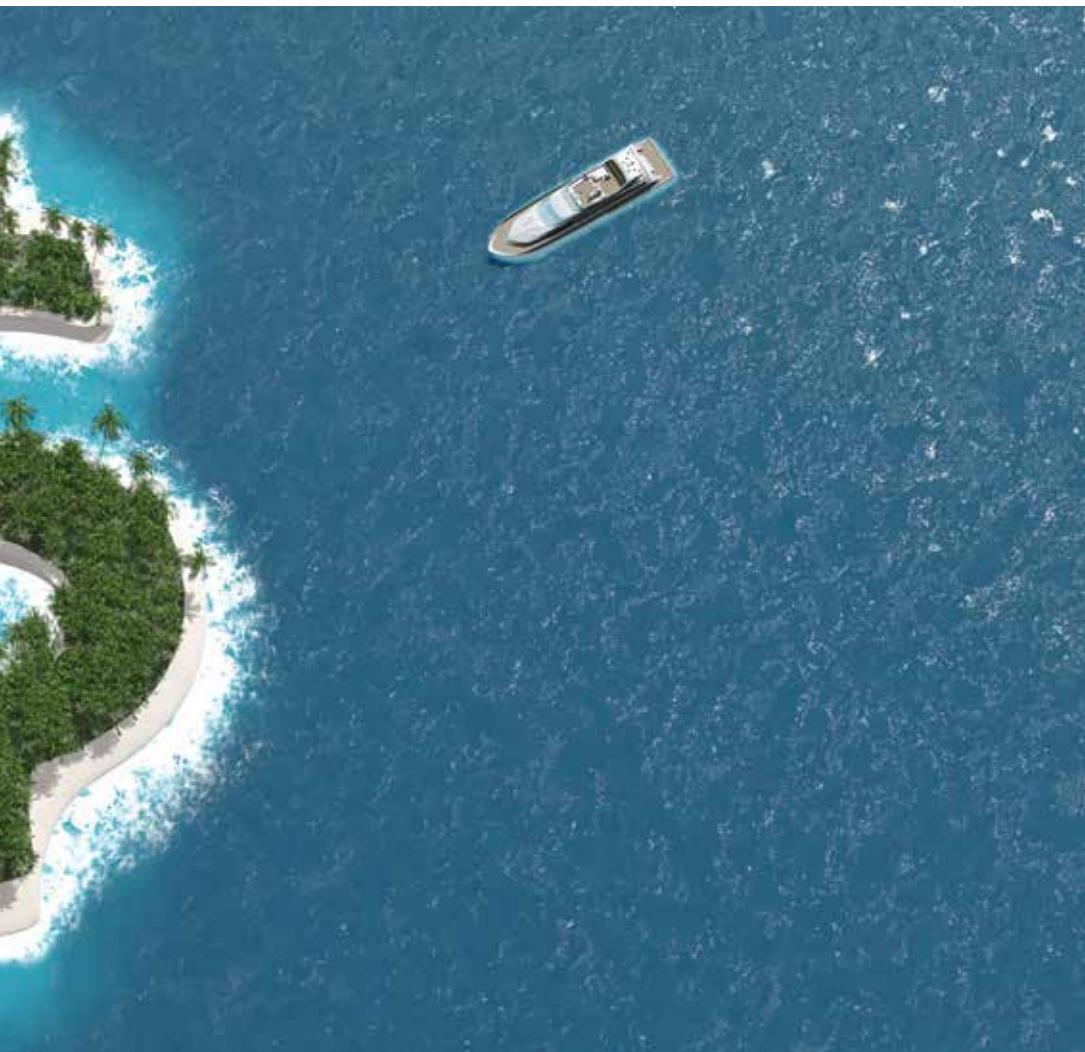
The United States is not the only country in urgent need of fresh revenue. Most European countries are in a very difficult situation after a decade of indiscriminate printing of money, followed by chaotic measures against Covid-19 and equally indiscriminate spending of the printed money. As a result, today's world has record, until recently unthinkable levels of indebtedness. Closing the offshore loophole, which is estimated to cost USD 100-600 billion a year, is one way out of this situation.

The 'race to the bottom' catchphrase was also used by the new White House National Security Adviser Jake Sullivan. "The US is committed

to end the race to the bottom on corporate tax rates and prevent corporations from shifting jobs overseas," he tweeted. Yellen and Sullivan are referring to the steady downward trend in income tax in recent decades. According to them, the attempts of some countries to become tax havens are forcing others to reduce rates in order to remain competitive. The fact is that in the 80s the average corporate tax worldwide was about 40%, and today it is only 24%.

**A SYMBOL OF THIS STRUGGLE** against falling corporate taxes are giants like Google and Apple with their famous 'double Irish-Dutch sandwich' - a complex scheme of tax evasion by registering branches in countries with generous tax breaks such as the Republic of Ireland and the Netherlands. As much as 43% of the income of large US transnational corporations comes from only five countries - the aforementioned Republic of Ireland and the Netherlands, along with Bermuda, Switzerland and Luxembourg. But they account for a mere 7% of the investments of the corporations in question. It is clear that these are tax avoidance schemes. But that's just the tip of the iceberg. Not all countries with low profit tax rates are tax havens. Bulgaria is an excellent example. The country has the second lowest rate in the EU





after Hungary - only 10%. In reality, the profit tax in this country is significantly lower than in popular tax havens such as Cyprus, Luxembourg, the Republic of Ireland or the Netherlands. But this has not turned us into an offshore paradise (except in particular cases for small companies from neighbouring countries, especially Greece). This proves two things. First, in order to attract investment, in addition to the low tax, you need things like an efficient and fast administration, and the inviolability of private property guaranteed by fair courts. Bulgaria is seriously criticised on both. And second, the status of an offshore paradise is a function not of the rate, but of the loopholes and mechanisms allowed - or deliberately left - by legislators.

**IN THIS SENSE, THE PLANS OF BOTH YELLEN** and the OECD are not only difficult to implement, but also not very pragmatic. “The OECD and the United States want to reach an agreement with an inclusive framework that includes 137 countries, so a compromise will be extremely difficult, especially given the short deadline for reaching it - before the end of June this year,” said Dr Raffaele Petruzzi of the University of Vienna for the In Development Show on Bloomberg TV Bulgaria. Besides, it is

difficult to achieve balance around the world because the economies are different - some of them import more, others export more, Dr Petruzzi added. And even if the changes happen, the question remains what the effects will be on society. “If we get Amazon or General Electric to pay more taxes, they will end up paying their workers less,” Chris Edwards, director of tax policy studies at Cato Institute, told Al Jazeera. “I think having the global minimum tax would be unfair to poor countries. It infringes on all of our sovereignty.”

Closing one door usually means opening another, says Daniel Bunn, vice president for global projects at the Tax Foundation in Washington.

“People talk about ending tax competition, but whether you’re competing over tax or something else, competition between countries for mobile resources of capital and labor, those things will continue... And if you take a tax policy off the table, then you could just end up with a system of countries offering just direct subsidies for business investment.” And one Republican congressman directly recalled the words of President Calvin Coolidge: “Collecting more taxes than is absolutely necessary is legalized robbery.” ■

## CORPORATE TAX RATES

### In Europe:

France	30%***
Greece	28%
Italy	27.9%
Austria	25%
Netherlands	25%*
Luxembourg	25%**
Spain	25%
Sweden	22%
Germany	22-33%
Russia	20%
Czechia	19%
Poland	19%*
UK	19%
Switzerland	16.55%
Croatia	18%*
Romania	16%***
Cyprus	12.5%
Ireland	12.5%**
BULGARIA	10%
Hungary	9%
Monaco	0%-33%

### Outside Europe:

Brazil	34%
Japan	30.62%
USA	21%
Bahamas	0%
UAE	0%
Bahrain	0%



# THE CRISIS HAS ALLAYED FEARS OF DIGITAL SERVICES

**Konstantin Velev, Chairman of the Association of Bulgarian Insurers and Executive Director of Armeec JSC**



By KONSTANTIN TOMOV / Photography IVAYLO PETROV

**Mr Velev, the pandemic has brought unprecedented turmoil in most sectors of the economy, and yet Bulgarian insurers managed to keep their premium incomes. How do you explain this? Which segments of insurance declined during the pandemic, and which compensated for them?**

Indeed, it was quite an unpredictable time for everyone. It is clear that some sectors were very painfully affected, such as tourism or transport. But in the end we actually finished 2020 with a result quite close to 2019, which was a pretty good year for Bulgarian insurance. What the crisis caused was to halt the good growth rate that the insurance market had seen in previous years. Even in January and February 2020, the market started with an almost 10% growth on an annual basis. Then, by the end of the year, this growth was erased. Understandably, different business lines behaved differently. Car insurance was almost unaffected. Property insurance recorded a marked increase compared to 2019. On the contrary, Travel Assistance fell quite significantly. Life insurance declined as well.

**And this is a decline from a relatively low**

**level compared to other EU members.**

It is. Since the beginning of the private insurance market in Bulgaria, non-life insurance has always been the main engine of the market, while life insurance has had a smaller share. The exact opposite of what we see in Western Europe.

**What is the explanation for this lag? What is needed for this sector to catch up?**

Over the years we have asked ourselves this question many times. We usually associate the explanation with the standard of living in Bulgaria in the last 30 years. These years were not easy for Bulgarian citizens. There were periods of serious declines in income, economic crises, and then recovery. But in general, for the majority of the population there was a lack of income and employment stability and predictability to allow taking a decision to maintain such a product. You know that life insurance products are long-term, usually lasting 10 to 20 years.

Incidentally, this also explains last year's decline: the first lockdown gave rise to precisely this lack of predictability. Even at the moment we cannot say how things will develop.

**Obviously, the forecasts are more optimistic because vaccines are available now. But on an individual level, things are not so clear to people.**

**The CEO of the AIG giant recently said in an interview: 'Our main problem as an industry is that we are literally drowning in data. We need to find smarter ways to assess risk.' Has insurance in Bulgaria changed in recent years due to the growing databases to which businesses have access?**

No way it couldn't have changed. The point is how fast these changes are taking place. The fact is that being insurance companies we collect more and more data. On the one hand, we have more access to them. On the other hand, the information systems are evolving. And third, let's not forget the changes in regulatory requirements. Insurance has gone through several such stages in recent years, especially since the entry into force of the Solvency II Directive. Each stage has seen a new tightening of the regulatory framework and growing reporting requirements. Which naturally leads to the collection of more data.

It is another story how much of this data is



actually useful for risk assessment. If we take even the most massive insurance – Civil Liability, we will see that it continues to be dominated by indicators that are unchanged from 10-15 years, and it is they which are the main valuation risk and tariff forming criteria.

But it is a fact that many new ones are being added. They differ for each company, depending on its policy and the information resources it uses.

I am fully convinced that in the future we will move towards the use of more and more data. Especially when we talk about the so-called tailor-made products.

**Globally, traditional sectors such as banks and insurers are threatened by unexpected new competition from technology companies. According to a study, insurers around the world invest an average of 3.6% of their income in digital technologies, which is even less than the banking sector. Is the sector in Bulgaria more flexible in terms of technology?**

Insurance is a conservative sector and this is understandable. The sectors in which the business is built on customer trust are conservative. When selling insurance, we want our customers to trust us. It is normal in such cases for companies to be more cautious, to rely on solutions that are secure and stable.

But, definitely, insurance cannot avoid the overall trend in the development of society. The truth is that in Bulgaria insurance companies have been following the path of digital transformation for many years - not at the same pace, of course. Until recently, this transformation was not very fast. But last year, I think, changed the picture completely. The coronavirus crisis has shown that we need to readjust to new realities very quickly. You know that even during the worst lockdown, insurers, as well as banks, did not stop working with customers. But they had to introduce safety measures very quickly, the most important of which was to boost online services. In just a few months, we have transformed a number of products and entire stages of customer service.

**Which, I suppose, will stay after Covid?**

It will. I can also say this from the experience of our company. For example, we made several changes to the claims registration process that we initially considered to be temporary solutions. But they turned out to be so practical that they will remain in the company's policy in the future. In other words, the crisis has virtually catalysed this transformation that companies have been following in recent years anyway. To some extent, conservatism in insurance was also related to customer attitudes. You know that many people in Bulgaria were not digital thinkers. The pandemic has changed that as well.

Last year, we encountered more and more of

our clients who preferred remote services due to fears of the coronavirus. And then, starting to do it from home, they saw that it was more convenient and not less secure. The crisis has removed fears and worries.

**The pandemic froze discussions on the long-delayed introduction of the 'bonus-malus' system. Has any progress been made after all?**

The experiments have been going on for two decades, but in fact the serious experiments are from the last few years. You know that there was an initial draft, which during the public discussion caused serious criticism of some principles in it, and was withdrawn. In 2019, discussions were already conducted entirely on the second project, which was prepared. The Association of Bulgarian Insurers submitted its proposals to the commission. However, the emergency measures do not allow for a serious public discussion to be held and this postpones the project. Because in the end this topic affects almost every Bulgarian citizen.

**Armeec turned a quarter of a century last year. How do you assess the achievements during this time, during which the company has changed from a small specialised player to one of the market leaders? What does the future development strategy envisage?**

The company has really come a long way in these 25 years. In 2020, we were once again the market leader in the Casco insurance. This has been achieved with a lot of work and the efforts of many people who have connected their lives with Armeec. I am glad that we still have employees who remember the beginning. And they help us a lot with their experience. We have branches in which the leading specialists have been in the company since its birth.

Of course, we could not be where we are now if the company had not changed over the years and had not responded quickly and adequately to all the new challenges.

We are currently working on a number of new initiatives. Many of them are related to this digital transformation that we talked about. Since last year we have introduced a new information system of the company. We are working on a mobile application that is as convenient as possible for customers.

**In which sectors of insurance do you see the greatest potential for development in the coming years in this country?**

Strategically for us the priority segment remains car insurance, and especially Casco insurance. We will continue to offer our customers the best. We strive to develop other lines of business, such as Travel Assistance and aviation insurance.

We make serious efforts in the field of property insurance - both in domestic property and in industry insurances aimed at businesses. ■

## GREEN AND GREENER

When a political body proposes changes in the business environment that would potentially increase the costs of the business and take away its competitive advantages, you would expect the business in question not to be completely fascinated. However, the opposite is happening with the infamous "Green Deal", the details of which were presented by European Commission in July, 2021. In a letter to the commission, leaders of more than 300 major multinational corporations in Europe welcomed the plans and called for a higher "voluntary" commitment in addition to a 55 percent reduction in greenhouse gas emissions by 2030. "As business leaders with a stake in the EU, we see a once in a lifetime opportunity to deliver the transition to a net zero economy", write the leaders of companies such as Daimler, L'Oreal, AB Volvo, Unilever, ArcelorMittal, Ikea, BASF, H&M, Titan Cement, Siemens and Shell.

However, leaders of some of the largest companies are warning Brussels that it needs to invest even more actively in the field of renewable energy, and loosen regulatory regimes. "We are still far from the needed volumes and capacity in terms of renewable energy to unleash the industrial electrification business case," they stressed.

Unlike industrialists, many of the environment ministers of the Member States have expressed serious reservations about the plan of the European Commission, which envisages the current payment schemes for harmful emissions to be extended to areas such as transport, cars and construction. Andrej Vizjak, the environment minister of Slovenia who is currently chairing the European Council, described the proposals as "too hard a nut", although he did not specify which of his colleagues the objections came from. Earlier, Polish Undersecretary for Climate Adam Guibourge-Czetwertynski warned that the commission was in fact "making a choice to tax poorer households". "Politically, this is a mistake and we must look for other ways to achieve our goals," he warned Euractiv. Luxembourg Energy Minister Claude Thurmes called the scheme "counterproductive". And French MEP Pascal Canfin directly called it a "political suicide" that would repeat the "yellow vest" protests.



# DISAPPEARING PROFESSIONS

The digital revolution will reduce the need for bank clerks, but other activities need to worry about advances in technology as well



By KALIN ANGELOV / Photography SHUTTERSTOCK

The digital revolution in the banking sector means many conveniences and time saved for customers. But it is also seriously shifting the labor market in the sector: the need for bank clerks to serve consumers behind the counter will be significantly reduced, while the need for IT professionals will increase.

Advances in technology have repeatedly wiped out entire professions: just think of video store owners or switchboard operators. But now this process is about to accelerate dramatically due to the impending boom in automation and artificial intelligence. It is impossible to predict exactly which professions will disappear along the way, but we can easily outline a few whose prospects are not very good.

**TRUCK AND TAXI DRIVERS.** We have been hearing for many years how autopilots will dis-

place people behind the steering wheel. This is still a distant prospect for cars. But in freight, automated systems are very advanced, and we will probably see them in mass use as early as this decade. Paradoxically, these forecasts have already caused a shortage of drivers, because young people shy away from this profession. There is currently a shortage of several hundred thousand truck drivers in Europe alone, and wages in the sector are rising. But the motivation to find a replacement technology is also growing.

**TRAVEL AGENTS.** Another dying profession. In the past, tour operators saved us time, effort and uncertainty. But today there are thousands of sites and applications that do the same job quickly, easily and with a lower commission. Employment in this sector is expected to fall by an-

other 26% this decade.

**CASHIERS.** With the advancement of electronic payments, which has accelerated further with Covid-19, the need for cash registers and people to service them is decreasing. Not to mention that many predict the end of the physical stores themselves - according to them, in the future we will shop from large warehouses and receive our food delivered directly home.

**COURIERS.** This is somewhat contrary to the previous point. If online commerce and delivery are growing at an unstoppable rate, then how is the courier profession threatened? In fact, dozens of high-tech companies, from Amazon to Continental and Boston Dynamics, are working to create robotic delivery machines - including flying ones. People have a future

in this profession only as suppliers of food with light vehicles such as bicycles - a trend that has also been greatly intensified by Covid. But here they will be forced to accept an ever lower price for their labor in order to remain competitive on the machines.

**POSTMEN.** In practice, this profession has already disappeared. Letters and telegrams are an irretrievable past. Utility bills are now emailed and paid online. And the sorting of shipments is done by machines more accurately and incomparably faster. Postmen who are still working do so on other fronts - as distributors of advertising brochures or couriers. The post offices themselves, in order to survive, must be redirected to the courier business.

**LIBRARIANS.** In the age of the Internet and the Kindle, you would consider libraries obsolete. This is still not the case, at least until their huge catalogs are digitized, a process that could create employment for existing librarians for years to come. But then the need for them will disappear completely - unless they retrain as information search consultants.

**FISHERMEN.** Pressure to restrict free fishing in the oceans is growing because many areas are already devastated by overfishing. If the currently dominant "ecological" line in world politics is maintained, it is likely that fishing will indeed be drastically reduced and humanity will rely mainly on fish farms.

**REAL ESTATE AGENT.** Frankly speaking, given the state of this sector in Bulgaria, we are not sure whether brokers are currently contributing particularly to the consumer experience. Along with a handful of professionals, there are hordes of amateurs freed from barriers such as elementary integrity. But the truth is that the need for real estate agents is decreasing day by day. New technologies allow not only a seamless search for hundreds of parameters, but also remote 3D reviews of properties without the need for annoying tours. ■

# YOUR MONEY

at the Right Place at the Right Time



**Minimizes impact  
of crisis periods**



**Time-tested  
investment model**



**No capital  
gains tax**

Dynamic automated investment strategy implemented with ETFs

Invests in crème de la crème of markets: US ETFs following US, Europe, Canada, Australia, Japan, Brazil, Russia, CEE, Middle East, Asia markets, etc.

Exclusive access to US ETFs, available to professional investors only in the EU

**Check with our financial consultants**

Tel. +359 2 81 000 70  
E-mail: [mutualfunds@elana.net](mailto:mutualfunds@elana.net)

Online chat on  
[www.elana.net/fund-management](http://www.elana.net/fund-management)

# THE DAY AFTER TOMORROW





## Pension systems in Europe are under pressure due to the aging population. Is there still a chance for a “soft landing”?

By **RADOSTINA NIKOLOVA** / Photography **SHUTTERSTOCK**

Both before the elections on 4 April 2021 and now on the eve of the new vote on July 11, the topic of pensions has been discussed only in connection with the supplement of 50 BGN for all pensioners. Whether it is useful or not, the measure in question is a fine reflection of the traditional approach to pension problems in Bulgaria. On the whole, this approach is limited to short-term patching up the situation.

**BY THE WAY, BULGARIA IS NOT ALONE** in the emerging pension crisis. You can judge yourself whether this is a reassuring or even more frightening fact. In Europe, the population is aging; advances in medicine provide a longer and in some cases better life but the birth rate fails to catch up at the same pace.

The gradual increase in the retirement age is no longer negotiable. Even China, after decades of ruthless birth control, has recently abandoned the “one child” policy and has allowed as many as three children per family. The reason is a census, which has shown that the most populated country in the world will also face the negative consequences of an aging population. All over the world, such a demographic picture is exacerbating the problem that fewer and fewer working people are supporting a retiree. According to the latest report of the European Commission on aging, The 2021 Aging Report, in 2019 the pension system dependency ratio was 66.3%. That is, per 100 employed Bulgarians there are a little over 66 pensioners. By 2060, this ratio will increase to 90%, after which it will be decreasing mainly due to the assumption of positive net migration.

**A POPULAR MYTH, REPLICATED RECENTLY** by the so-called patriotic formations, has been that the birth rate in Bulgaria is record low. It is by no means high, of course, but in fact the birth rate, meaning how many children per woman,

is expected to remain unchanged until 2030 at 1.6. That means 0.1 above the European Union average rate. European statisticians forecast a modest increase in Bulgaria’s rate up to 1.7 In 2035, which will again be 0.1 above the EU average rate.

In fact, the two main factors that contribute to the shrinking population in Bulgaria are emigration and mortality. The population of Bulgaria, or at least the people still living in this country, are largely victims of the shocking state of the health system and the lack of prevention, which leads to many preventable deaths.

The life expectancy of men in Bulgaria by 2019 is among the lowest in the EU - 71.5 years. Only in Latvia it is lower - 71.3 years. The average for Europe is 78.7. For women, the average life expectancy in this country is 78.8 years, which is the lowest in the community.

The factors that lead to premature death are the same as those contributing to earlier retirement, poor working capacity and a lower quality of life in general. The statistics for Bulgaria are so eloquent that in 2018 the British magazine The Economist published an article entitled If Hell is Other People, Bulgaria is Paradise. It states that according to UN forecasts, the country’s population will shrink to 5.2 million in 2050, which is the fastest pace in the world.

**THE IMPENDING DEMOGRAPHIC CRISIS** is not a new phenomenon. Many experts warn of its potentially severe consequences. But as a problem that cannot be solved within one term, it has been traditionally ignored by all nuances of the political spectrum. Only employers’ organisations proved to be more vociferous in their demands for facilitated labor immigration. However, the integration of the Roma is still neglected though it has a huge potential for both the labor market and the pension system. By the way, another popular myth is the high birth ▶



► rate among the Roma. Like all other Bulgarian citizens, the Roma leave the country in search of better opportunities abroad, and the rest of them in Bulgaria are reluctant to have many more children than the other Bulgarian citizens. Unlike the majority of Bulgarians, however, they are victims of discrimination and are a convenient tool in political speech, especially in the election campaigns. The integration of the Roma would mean their increased participation in education and then in the labor market, which implies an increase in the share of educated and informed population. And unfortunately, few political parties have an interest in such a development.

**AGAINST THIS OBJECTIVELY GLOOMY BACKGROUND**, the need for an alternative to retirement income in the very foreseeable future is becoming clearer. Unfortunately, the standard of living in Bulgaria, especially relative to the EU average, still does not allow the average Bulgarian to think about savings, let alone investments. According to the Bulgarian National Bank data from 2021, nearly 60% of household deposits are up to 1,000 BGN. Moreover, this is the only group where a decline on an annual basis is registered. That means these depositors have been forced to resort to their relatively small savings. All other groups have been able to increase the amounts in their deposit accounts. For example, the Spanish authorities are preparing a voluntary savings plan to persuade the population they should not rely solely on state pensions. Pension costs in Spain are expected to reach around 14% of GDP by the middle of this century. By comparison, the average share of the Organisation for Economic Cooperation and Development is below 10%. In Bulgaria in 2019 the public pensions costs was 8.3%, and in 2070 it will probably reach 9.7% of GDP.

**THE GAP BETWEEN LIVING STANDARDS IN BULGARIA** and the euro area is a significant and justified obstacle to the introduction of the euro, where the political elite are so confidently headed. The eurozone, and more specifically the ECB, is another factor fueling the pension crisis. For nearly 10 years, the institution in Frankfurt has been pursuing an unconventional monetary policy, including negative interest rates and a large-scale government bond-buying programme to help recover from the 2013-2014 debt crisis. Many experts liken these measures, adopted by a number of other central banks, to simple printing of money, which does not solve the structural problems in the eurozone economy. The reduction of the yield on German 10-year government bonds to below zero was an emblematic manifestation of the ECB's programme. This means that if you buy a bond worth 100 euros, you will certainly be at a loss when it matures. But why buy such a tool at all, the general public would ask. Here on the agenda are pension funds, which, as institutions

THE SITUATION IN 2019		
	Bulgaria	EU
Birth rate	1.6	1.5
Life expectancy, men	71.5	78.7
Life expectancy, women	78.8	84.2
Net migration, thousand	- 3.9	1317.5
Share of people over 65	21.5	20.4
Share of people between 20 and 64	59.6	59.3
Public expenditure on pensions, % of GDP	8.3	11.6

FORECAST FOR 2070		
	Bulgaria	EU
Birth rate	1.7	1.6
Life expectancy, men	82.9	86.1
Life expectancy, women	87.7	90.3
Net migration, thousand	10	1036.8
Share of people over 65, %	30.9	30.3
Share of people between 20 and 64	50.8	50.8
Public expenditure on pensions, % of GDP	9.7	11.7

of great public interest, are subject to restrictions on their investments, precisely because they manage pensioners' contributions. For example, a pension fund would find it very difficult to invest large sums in cryptocurrencies and high-risk instruments. The purchase of bitcoin worth \$ 100 million by Massachusetts Mutual Life Insurance Co. was a curious investment. The US investment bank JP Morgan Chase & Co predicts growing interest in bitcoin from institutional investors, including pension funds but emphasises that pension funds are unlikely to ever have large exposures.

**STATE BONDS ARE CONSIDERED LOW-RISK INSTRUMENTS** because of the presumption that the issuing country cannot go bankrupt. In 2019, on the subject of the aggressive printing of money by central banks, leading to negative returns on government securities, financier Mr Vladislav Panev said that "in the coming years, textbooks on finance will be rewritten". He also warned of potentially high inflation, which in 2021 is already a fact after the approved colossal "stimulus packages" for recovery from the COVID-19 crisis. Annual US inflation in April was 4.2%, the highest in more than a decade. Accelerated appreciation of products and services eats up both disposable income and potential return on investment. According to Mr Panev, a "bubble of balloons" is being created in the case of otherwise secure government securities. Even in the great recession of 2008, complex mortgage

financial instruments were also considered safe as rating agencies gave them a first-class rating. However, they turned out to be a complex mix of actually quite low-quality and high-risk mortgages, most likely not to be serviced at all, as it happened. We remember what happened when this bubble burst.

**"FOR A BUSINESS LIKE PENSION INSURANCE**, where a large volume of assets is managed, the low-interest environment is a serious risk," said Mr Kosta Cholakov, chairman of the board of the DZI bank, before Bloomberg TV Bulgaria. KBC Group, owner of the DZI bank, signed an agreement for the acquisition of the pension insurance and life insurance business of NN Group in Bulgaria worth 77 million euros. Mr Cholakov added, that "opportunities for investment in corporate bonds, which would give a better return, are quite limited". According to Mr Cholakov, it is difficult to predict how long households and businesses in developed countries will live in an environment of low interest rates. And indeed, even if we see interest rates rise to pre-COVID-19 levels, these values are historically very low. Besides, they lead to low return on investment, low interest rates posing another risk: in the next crisis, central banks will simply have nowhere to lower interest rates to relieve companies and households. And as experience shows, each subsequent crisis has an increasingly unexpected origin. ■

# BULGARIA IN THE MORNING

hosted by Maria Konstantinova and Miroslav Dimitrov



**ON  
AIR** BULGARIA

| 07:00 AM - 09:00 AM | Monday - Friday



[bgonair.bg](https://www.bgonair.bg)



## 5 QUESTIONS

# Svetlin Nikolov

CEO of Stone Computers



### 1 **Covid-19 has brought perhaps the biggest digital transformation for businesses since the advent of the WWW. How has this affected Stone Computers' results?**

- Overall, in a positive direction. Before the pandemic, it was still difficult to convince customers that Cloud services were the future. If then the implementation of a project took between nine months and a year and a half, during the pandemic it happened within two to three weeks.

This time has helped a lot in digitalisation - not only in banking, finance and telecommunications, but also in all other industries. Many segments of manufacturing also became digital, in one form or another.

So, in our sector, the pandemic has had a positive impact. There has been an increase in the number of projects of all kinds, from integration to security.

### 2 **The concept of working from home goes back long before the coronavirus, but until now most companies were sceptical about its effectiveness. Have recent months proven it's a workable model?**

- I'm not the biggest fan of working from home. At least of the version where employees work entirely from home. One of the main reasons is that creativity is lost that way. When you're around your colleagues in the office, socialising, ideas are born at any time.

For example, while having a cup of coffee together, or while smoking a cigarette. Whereas people who work from home only communicate with each other during so-called 'stakes', during which they have to get a specific job done in a specific amount of time. The rest of the day they are home alone. And this is where the creative thinking that yields value-added solutions gets lost.

Anyway, the last year has proven that in quite a few industries you can work from home.

### 3 **Which other changes that have occurred alongside the pandemic are temporary, and which will survive long-term?**

- Working from home will survive, in some form. It won't be what it used to be during the pandemic. Already, many of our clients are gradually bringing employees back into their office - telecoms, insurance companies, etc. But still, the home office concept will be much more prevalent than it was by 2020.

The other thing that will certainly be left over from the pandemic is Cloud solutions. Companies will increasingly need them. As well as security solutions, because one goes hand in hand with the other.

### 4 **You are an expert in information security. With the massive proliferation of the home office concept, virtually every business suddenly finds itself with many**

### **more access points than it is used to. How is the issue of data protection addressed?**

Through the so-called VPN solutions. In the first weeks of the pandemic, we had to make hundreds of these VPNs for our customers. This creates protection for the data that flows from the home office to the headquarters and back. Whether it's a video call, or an employee doing some sort of reference in the company's system. It all goes through the VPN to be protected.

Things are the same way in private life. Actually, these days almost everyone uses such VPN solutions, whether through a phone app or e-banking. We don't see them, but they are there. There are always security tunnels built under the surface.

### 5 **With the Internet of Things, a giant invasion of cameras and sensors into our daily lives has begun. Does this mean that, for the sake of the convenience of new technologies, we will have to give up the right to privacy forever?**

To some extent, it does. Indeed, there are already cameras, readers and checkpoints everywhere. That is precisely why the GDPR regulation was created - to allow us to still retain a little privacy, to leave us the right to be digitally erased if we want. But the fact is that you can now always know where a person is and what they are doing. ■



# SOCIETY & POLITICS

## FAKE AND 'GENUINE' NEWS **58**

CAN TRADITIONAL RESPECTED MEDIA BE A GREATER THREAT TO DEMOCRACY THAN FABRICATION AND MISINFORMATION?



**42** ELECTIONS THE BULGARIAN WAY

**46** THE EAST, THE WEST AND US

**56** BULGARIA AND THE POST-DEMOCRACY



# ELECTION MYTHS AND LEGENDS

Have traditional parties died already, was voter turnout really low, and should we be afraid of the Revival?

By KALIN ANGELOV / Photography DIMITAR KOSEMARLIEV



Psychologists say that of all the professions, actors are the most prone to depression - simply because trying to get into the image they play puts extra strain on the psyche. However, the psychologists obviously did not study the Bulgarian political figures, otherwise their ranking would undoubtedly have had a new leader. For three decades now, most leading politicians in Bulgaria have had to maintain two personalities: one on stage, in front of the general public, and another behind the scenes, where relations are often quite different from those demonstrated in front, and where the most vicious vocal enemies turn out to be allies.

## THE NOVEMBER ELECTIONS FOR PARLIAMENT

(third this year) and for president have shown more clearly than ever this schizophrenic character of the political elite in Bulgaria. It is difficult to find such a campaign elsewhere in Europe: for example, the almost open war between the BSP and the president that the party itself nominated in 2017; or the need for the leaders of Democratic Bulgaria to defend themselves against the attacks of their own presidential candidate. Not to mention the previous vote in the summer, when the supposedly unanimous „parties of change“ actually spent all their energy in aggression against each other. But in addition, the elections for the 47th National Assembly ►



► showed something else: that this model, which has led Bulgarian political life since 1990, is running out.

## THE „BIPOLAR MODEL“ IS USUALLY

used in political life, dominated by two ideologically opposing parties. But in the particular Bulgarian case, „bipolar“ refers to the methods of voter mobilization. For three decades, the main tools for this have been the opposition between two poles: communists against anti-communists, pro-Russians against pro-European forces, „patriots“ against the Movement for Rights and Freedoms, the ethnic Turks party. It does not matter that the „anti-communists“ largely come from the same repressive apparatus of the former Bulgarian Communist Party as the „communists“. It also does not matter that the „pro-European“ parties actually quite often have defended Russian interests in Bulgaria - and vice versa. Nor does it matter that the MRF and the „patriotic“ formations exist in excellent harmony and resort to aggressive rhetoric against each other only on the eve of elections.

But the obvious conclusion from the three votes held this year is that this bipolar model is working less and less. Convincing evidence is the rapid collapse of the so-called traditional parties.

## THE BULGARIAN SOCIALIST PARTY,

which at the dawn of change in the early 1990s easily garnered more than 2 million votes, and which even in 2017 was quite close to one million, now received less than 270,000, and naturally reported the weakest result in its history.

At the other „pole“ things look the same: there Democratic Bulgaria is the ideological successor of the former Union of Democratic Forces (not to be confused with the formation of the same name, which today exists as a satellite of GERB). After the revival of the summer elections, which brought the DB about 40,000

# THE BULGARIAN ELECTIONS 1990-2021

The election results of the past can be confusing because of the ever-emerging and disappearing coalitions. A few clarifications:

- The results of the BSP are in fact the results of the coalition in which the party participated in the specific elections
- The results for the so-called „right“ include the main forces recognized by the voters as right and as successors of the original UDF. In some of the elections they appeared as two or more formations - here we have indicated their total number of votes (for example, the results for 1991 include UDF, UDF - Center and UDF - Liberals; the results for 2017 include „Yes, Bulgaria“, „Reformist Bloc „and“ New Republic „, which appeared separately and did not enter parliament, although their overall result was close to 9 percent)





new votes, the November vote took them nearly 180,000, which is also the weakest result in this part of the spectrum at all. In the past, the „right“ has performed worse, staying out of parliament, but then this was always the result of a split and the appearance of several competing formations in the elections. But the total number of votes for these formations has never fallen below 260,000.

## „THIS IS THE DISSOLUTION OF HARD CORES,

the dissolution of loyalty. In fact, this is the disintegration of parties.“ Boryana Dimitrova, a sociologist at Alpha Research, told Bloomberg TV Bulgaria. „Probably the whole political landscape will start to change if the so-called ideologically justified parties start to disappear.“ According to Dimitrova, this disintegration of the party cores is also the main explanation for the discrepancy in the preliminary polls and the real results of the elections. „The merger of the parliamentary with the presidential vote and the conflicts in both the BSP and the DB have obviously led to an increase in the number of votes for ‚We continue the change‘ as a continuation, as a projection of the presidential institution,“ Boryana Dimitrova said.

„The BSP is an amazing party in this regard. It can suffer as many losses as no other,“ Prof. Antony Todorov, a political scientist, told Bloomberg TV Bulgaria. „But I wonder how long the patience of the Socialists will last. This is an electoral catastrophe.“

According to fellow political scientist Hristo Panchugov, the Socialists have two scenarios. „One is for the BSP to remain as Kornelia Ninova shaped it: a closed party, focused on a specific group of Bulgarian citizens who have a clear attitude towards the previous regime. This is the BSP at the moment. It is far from being a modern social democratic party, far from from seeking to expand its representation in groups that do not suffer from nostalgia for communism. This scenario goes through its encapsu-

lation, isolation and the emergence of another political formation on the left. The second option is new leadership with new policies and priorities - but I'm not sure if it's too late for that“, Panchugov said.

## WHETHER ANY REFORM PROCESS CAN TAKE PLACE

in the BSP will probably be clear from the first months of the new coalition government headed by the unexpected winner in the elections: „We continue the change“ of Kiril Petkov and Asen Vassilev. These months will also be a test for the other „parties of change“ - „There is such a people“ by Slavi Trifonov and the shrinking „Democratic Bulgaria“. If the stated goals and priorities of the four parties are sincere, maintaining a stable government should not be a problem. But if there is a conflict between publicly played roles and real, non-public dependencies, the coalition will be short-lived. „These political forces seem to be setting a mutual trap,“ Boryana Dimitrova said. „We see a series of behind-the-scenes obstacles that are still coming to the surface quite quickly.“ We should also remember that it was a government formed in a hurry - because of the very short deadlines provided by law and the wasted months since the previous vote. „This agenda had six months to be announced, to find the dividing and converging lines,“ Panchugov stressed. Instead, the protest parties focused entirely on their own campaigns.

## THE OBVIOUS WINNERS OF THE ELECTION

are President Rumen Radev, who won a second term, and the closely related „We continue the change“. But even these victories are far from unconditional. The formation of Petkov and Vassilev will still have to deal with the classic party building in places, so that its voters have someone to communicate with, emphasizes Antony Todorov. As for the president, he has already proved that he can bring together

a large group of citizens united by the desire for justice, for more fair governance. But this group can hardly become a political project because it is too diverse, Todorov said.

On the other hand, thwarting the coalition government doesn't seem to be in anyone's interest either. „Another election, for example in March next year, will be a real disaster for the party system,“ said Antony Todorov.

## THE ARGUMENT THAT PEOPLE ARE TIRED OF POLITICS

seems very convincing if we look at the turnout data: from well over 75% in the first few votes in the 1990s, through about 60% in the first years after Bulgaria's European membership in 2007, to the all-time low of 40% this November. But is voter turnout really declining? Or are the voter lists just outrageously inflated with long-dead people?

The presence of such „dead souls“ in the lists has been commented on for years, but not too publicly. However, it is enough to compare the data of the Central Election Commission with those of the National Statistical Institute for the population to see the scale of the problem. For the November elections, 6,635,305 million people were included in the voter lists in Bulgaria alone. However, according to NSI data as of December 2020 the population of Bulgaria is 6.916 million people. From this difference it follows that the minors who do not have the right to vote are only about 281,000 people. However, the NSI reports 998,000 Bulgarians under the age of 14, and another 314,000 between the ages of 15 and 19, of whom only some have reached the age of majority. Therefore, the real number of adult voters in Bulgaria cannot be more than 5.9 million, and in all probability it is about 5.7 million. Assuming that the introduction of machine voting has reduced the chances of abusing these „dead“ votes, this explains both the lower turnout and the sharp decline in the results of some parties.

## THIS ALSO TAKES US TO THE LAST CURIOUS TOPIC

of the November election: the entry of „Vazrazhdane“ (Revival) into the parliament, which was accepted with such horror by many. Horror, which is currently difficult to explain: this is not the first time a populist and anti-European formation has been represented in the National Assembly. Kostadin Kostadinov's party is no more radical than the former Ataka, for example. And its 127,000 votes don't look like the beginning of an avalanche. In fact, the entire so-called patriotic vote has melted dramatically: Vazrazhdane, VMRO, Ataka, NFSB and their smaller satellites barely garner a total of 176,627 votes - more than two times less than Ataka alone took in 2009.

However, the success of „Vazrazhdane“ raises important questions about the future, and about the „elephant in the room“, as the British say - that is, about several key topics which the other parties in Bulgaria evade at all costs. These topics are the EU Green Deal, the possible adoption of the euro in Bulgaria and the measures against Covid-19. Anti-European sentiment in Bulgaria is currently negligible. But the high social cost of the green transition and Brussels' growing pressure for more centralization and power over individual members will inevitably reinforce these sentiments. In order to fend them off, the „normal“ parties in Bulgaria must realize two things. The first is that people's fears should be addressed not with contempt and condescension, but with honest conversation. And secondly, that Bulgaria is not admitted to the EU by blessing from above. It is a full member and can declare and defend its own interests - as do Poland, the Czech Republic, Hungary, Slovakia. A number of Bulgarian representatives in the European institutions were nicknamed „Madame Yes“ and „Mr. Yes“. Continuing this behavior in the next crucial years will be catastrophic, and will open the door wide for unscrupulous populists. ■



# Elections the Bulgarian Way

Even before the Soviet-enforced communist rule, moments of pure democracy in this country were counted on the fingers

By KONSTANTIN TOMOV / Photography ARCHIVES

'The elections are being held in an atmosphere of brutal terror and vote rigging... Vote buying is widespread. This leads to apathy among voters, convinced in advance that no matter how they vote, their own situation is unlikely to change.'

This description of the electoral process in Bulgaria will undoubtedly sound very familiar. But it actually belongs to Prof Ivan Ilchev ('Rose of the Balkans'), and refers to the last decade of the 19th century. A good reminder that democracy has de facto never been able to root deeply in the thick soil of Bulgarian politics.

The first democratic elections in this country after the fall of totalitarianism for a Grand National Assembly in June 1990 gave rise to accusations of manipulation, protests, and tent camps. Since then, each subsequent vote has urged people to believe that their vote does not change anything. There were votes bought and ballots changed. There was a corporate vote in which workers in large enterprises were forced to vote for their employer's party. There were a series of political clowns involved in the process just to distract attention and ballots. There were all kinds of clever schemes like the one with pre-filled ballots in sympathetic ink. If your vote coincides with the secretly filled-in check-

box, everything is fine. If not, the ballot is invalid. There was a case when an MP from the ruling party was filmed in the room of the municipal election commission during the counting, and then how he leaves with a bagful of ballots.

**LAST BUT NOT LEAST**, there have been countless failures by the legislature, the Central Election Commission and the court. In 2011, the right-wing candidate Nayden Zelenogorski was forced to stand in Pleven against a formation called Coalition For Zelenogorski. Not even the reference taken from the Civil Registration and Administrative Services that there was no other person with that name in the country helped. But even that pales compared to the 2001 election, in which the Simeon II National Movement won 1.952 million votes and 120 seats in parliament - just one seat short of the required majority. This unfortunate missing seat gave birth to the coalition with the Movement for Rights and Freedoms and probably foreshadowed the development of Bulgarian politics for the next two decades. However, two other strange formations took part in the same election: the Simeon II Coalition, which received 157,000 votes, and the National Union for Tsar Simeon II, with 77,000 votes. With the votes stolen from the two fake

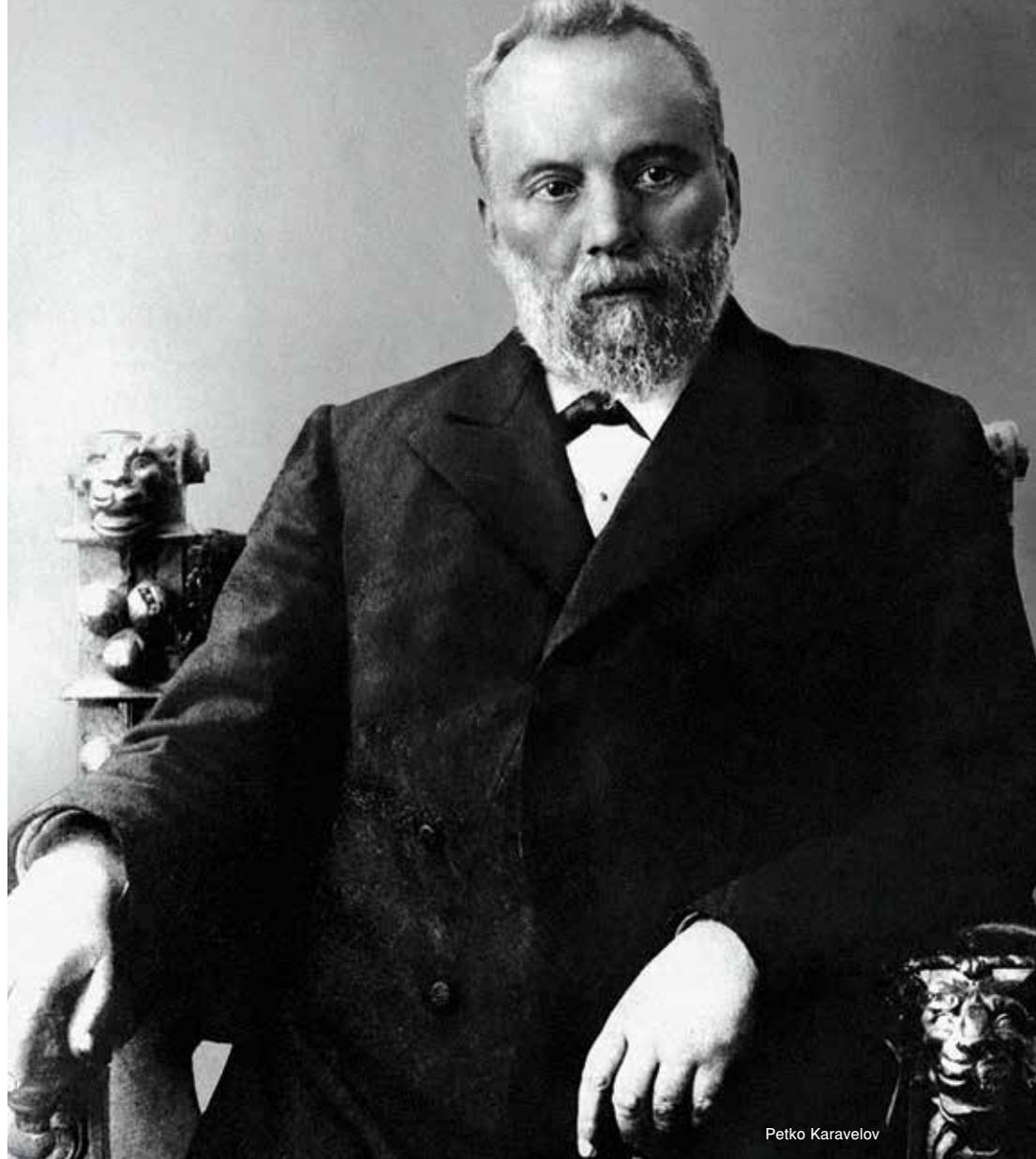
formations, the National Movement Simeon II would have probably had 12-15 more deputies.

**ACCORDING TO A SUSTAINABLE MYTH**, all these shortcomings of Bulgarian democracy are a product of the heavy legacy of the totalitarian system. But the sad truth is that even in the former Kingdom of Bulgaria, mythologised by some, moments of pure democracy are counted on the fingers. The very first Bulgarian Prime Minister Todor Burmov, in charge of organising the elections for the 1st Ordinary National Assembly on 30 September 1879, began mass dismissals of officials from the rival Liberal Party to reduce their influence in the constituencies. Elections in the late 19th century were full of manipulation, violence and even frequent murders. In October 1886, in Dupnitsa, the district administrator arrested opposition leaders in order to influence the election outcome. But he was attacked by angry villagers who beat him, tortured him in indescribable ways and finally threw him into the river from a height of 9 metres. The other members of the election bureau, whom the mob managed to capture, were also brutally killed.

In some areas, 100% of the vote was for the candidates of the government parties, some-



The "European" of Bulgarian politics, Dr. Konstantin Stoilov, who ordered his party members to "blow out the candles" if the election doesn't go well for them



Petko Karavelov

thing that even communism failed to achieve later.

The temptation to tip the scales was too strong even for the most famous Bulgarian politicians. Stefan Stambolov is proverbial with the application of a 'firm hand'. But even Konstantin Stoilov, the 'European' of Bulgarian politics, remains in history with his famous instruction to the local government officials of Byala Slatina: if during the counting of votes it turns out that the opposition takes the lead, 'extinguish the candles' and declare the election invalid, writes Ivan Ilchev. Alexander Malinov, one of the few convinced Democrats in Bulgarian history, also noted that the occupation of the highest authority is possible even 'without strict adherence to the formal rules specific to parliamentary governance in this respect.'

**SO TODAY'S ATTEMPTS TO** 'clear' the electoral process do not have a rich tradition to follow. But technologies are used instead.

The most significant problem for the fairness of the elections are probably the voter lists. It is no secret that in Bulgaria there are people registered to vote who have not been alive for a long time. This problem has been talked about for almost two decades, but no one has taken any

significant steps to solve it. Now it was almost absent from the discussions, apart from the insistence of There Is Such a People that changes in the electoral system should be made - but after the upcoming census.

Even a cursory comparison of official data shows the extent of the problem. 6.732 million voters were registered by the Central Election Commission for the last elections. However, according to the National Statistical Institute (NSI), the population of Bulgaria as of last December was 6.951 million people. The difference between the two numbers, 219,000 people, falls on minors and those who for some other reason are not allowed to vote. However, NSI holds that there are 750,000 minors in Bulgaria. As a result, there are more than half a million 'dead souls' on the voter lists. This is 16% of the vote in the usual turnout recently.

#### **THE OTHER LOUDLY DISCUSSED CHANGE**

in the electoral process also depends on the census: the introduction of a majority electoral system in two rounds. It has been the main idea in Slavi Trifonov's platform since the failed referendum in 2016, but now There Is Such a People announced that it is better to postpone its introduction till the first regular elections after the

census. This apparent inconsistency is entirely understandable: no one can predict what results such a system would produce at the moment.

That doesn't stop many from trying, of course. Valeri Naydenov, the father of tabloid journalism in Bulgaria, claims with unusual pathos that it is the solution to all problems and will make everyone happy: from voters to MPs and from populist leaders to small elitist parties. At the other pole are political scientists who insist that the majority system will leave only two parties in parliament and will effectively lead to authoritarian rule.

#### **SUMMARISING, IF THE HISTORY OF FREE**

**BULGARIA** has taught us anything, it is that it is not important what the system is, but how it is applied. Only the obvious pursuit of honesty and transparency can overcome apathy and return half of the Bulgarian population to politics, with which it is currently completely disgusted. Although it would help if we had political figures of the rank of Petko Karavelov. Imprisoned in the Black Mosque and tortured after the Russophile riots, he was visited by worried Western diplomats who learned of the tortures. We imagine what modern Bulgarian politicians would say in his place. Karavelov found the strength to tell them: 'Such things do not happen in my homeland!' ■



# COMMENT

## BULGARIA WAS LATE WITH ITS DEMANDS TO SKOPJE

By BOBI BOBEV \* / Photography EUROPEAN COMMISSION



The very fact of holding the Western Balkans - European Union meeting (October 6) is gratifying. It shows that since Bulgaria, during its presidency of the European Union, raised this issue in 2018, now other EU members that have immediate interests in this region are also showing the necessary activity. Part of this is the meeting in Brdo, organized by the Slovenian Presidency.

### THE WESTERN BALKANS

are six countries for which there are differing opinions, to which expectations are different. It is very difficult to harmonize Europe's criteria for them, especially for the so-called decisive-vote countries. However, it is hardly a coincidence that it was Angela Merkel and Emmanuel Macron in Brdo who organized separate meetings with Bulgarian President Rumen Radev and Macedonian Prime Minister Zoran Zaev, as well as with Serbian President Alexander Vucic and Kosovo Prime Minister Albin Kurti. That is, the EU and some influential members are looking for hot spots that create preconditions for instability, uncertainty, suspension of the integration process. The recent tour of Ursula von der Leyen's six states can be treated in the same vein.

Of course, many things would become clearer as we see the final text of the declaration to be adopted. My personal expectations are that we will not find specifics in it. It was said that Slovenia had proposed targeting 2030 as the deadline for the accession of the six countries - an idea that was supported by other countries as well, such as Austria. But fixing dates is unlikely. There will be encouraging phrases

about the future, emphasizing the European perspective ...

### RUSSIA, CHINA AND TURKEY WOULD DEFINITELY

benefit from the creation of a political vacuum in the region, from the lack of cooperation, from the well-known Euroscepticism that was born and developed in these societies. Citizens of these six countries are increasingly beginning to feel that the EU is giving them promises that it is not fulfilling. They see in the European Union a kind of panacea for solving all their domestic and international problems. This is understandable, more than a decade ago Bulgaria similarly aspired to become a member of the union, and undoubtedly benefited from it.

How could we get out of the situation we found ourselves in with North Macedonia? This will be quite a difficult task. It was only in the last period of time that we began to explain our own position. And this position should have been clear to the whole world, and especially to our partners in Europe, a long time ago. Bulgaria has made clear mistakes in building this policy. Our requirements, our conditions, had to be stated in the early 1990s.

### IN MY EYES, THERE IS A SIGNIFICANT DIFFERENCE

between reaching an agreement on the Prespa Treaty between Greece and North Macedonia, and signing the Treaty of Good Neighborliness between Bulgaria and North Macedonia. Because

Greece first achieved what it wanted, achieved the results, and then agreed to sign the Prespa Treaty. And we first signed and then set the terms.

Our close relatives from Northern Macedonia had not given a reason to vote them such a credit of confidence with this decade-long anti-Bulgarian hysteria that is developing there. It was as if we had put the cart in front of the donkey.

Now it is quite difficult to find a way out. This will be a serious problem for our diplomacy, because the pressure is serious, although in my deep conviction we have also done someone else's work - there were countries that considered it hasty to start negotiations with North Macedonia and Albania right now.

### WAS IT A MISTAKE THAT IN 1992,

Bulgaria was the first to recognize an independent Macedonia? With this act Bulgaria showed its good intentions, demonstrated an understanding of the desires of the society in the then Macedonia to become an independent state. But immediately after this recognition, in the further regulation of relations, we had to set our own conditions. Because what we insisted on in 2017 when signing the Neighborhood Agreement has remained largely unchanged since 1992. During that time, almost nothing in the relationship had changed.

*\* Prof. Dr. Bobi Bobev is a historian and diplomat, former Bulgarian Ambassador to Albania and Kosovo. The comment was made for Bloomberg TV Bulgaria, in the show "The world is business" hosted by Ivaylo Lakov. ■*

# DENTAL CLINIC

# EO Dent

*Merry Christmas and a Happy New Year!*



*Разчитайте на нас и в празничните дни!*

Подарете си красива усмивка в EO Dent и решете своите проблеми със зъбите за една седмица в България.

Цялостна грижа - от избелване до имплантология, 3D диагностика, лечение с лазер, фасети и цирконинови конструкции. В EO Dent можете да заспите (със специална упойка - седация) и да се събудите с преобразена усмивка. Всичко това е реалност при нас. Много години опит, доверие и сигурност!

EO Dent е клиниката, която преобрази усмивките на много известни личности.

ИМПЛАНТОЛОГИЯ  
ЛЕЧЕНИЕ С ЛАЗЕР  
ОРАЛНА ХИРУРГИЯ  
ПАРОДОНТОЛОГИЯ  
ДЕНТАЛНА ЕСТЕТИКА  
3D ДИАГНОСТИКА  
ОРТОДОНТИЯ  
ДЕТСКА ДЕНТАЛНА МЕДИЦИНА  
ФИЗИОТЕРАПИЯ  
ДЕРМАТОЛОГИЯ

IMPLANTOLOGY  
LASER TREATMENT  
ORAL SURGERY  
PERIODONTOLOGY  
DENTAL ESTHETICS  
3D DIAGNOSTIC  
ORTHODONTICS  
CHILD'S DENTAL CARE  
PHYSIOTHERAPY  
DERMATOLOGY

Treat yourselves to a beautiful smile at EO Dent and find a solution to your teeth problems during one week in Bulgaria.

Complete care for your smile - from teeth whitening to implant dentistry, 3D diagnostics, laser treatment, veneers and zirconia constructions All this is a reality with us. In EO Dent you can fall asleep (with special anesthesia) and wake up with a transformed smile.

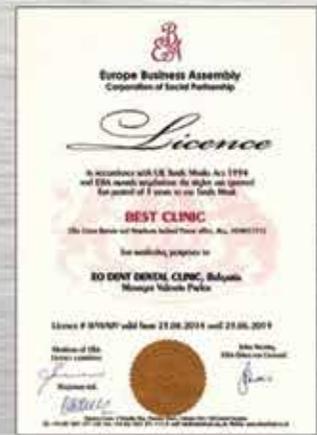
Many years of experience, confidence, and security.

EO Dent is the clinic that has transformed the smile of many celebrities.

*Count on us on holidays as well!*

[www.eo-dent.com](http://www.eo-dent.com) [info@eo-dent.com](mailto:info@eo-dent.com) [www.eo-implant.com](http://www.eo-implant.com) [f EODent](https://www.facebook.com/EODent)

тел./tel. +359 888 500 522, +359 888 46 46 66, +359 888 14 10 10 [@eo.dent](https://www.instagram.com/eo.dent)





# THE EAST, THE WEST AND US

**Bulgarians frequently suffer from the fact that they are split between two civilisations. But in truth, they have much to gain from this**

By **BOYKO VASILEV** / Photography **SHUTTERSTOCK**

Where do we, Bulgarians, fall? In the East or in the West?

A often pose this question to Bulgarian intellectuals. And you can tell a lot by their answer. Some will focus on the East, others – on the western aspects of our nature. In this conversation, the oldest duality of contemporary Bulgarian society will inevitably shine through: Russia or Europe?

## TODAY, WITH THE AMERICAN PRESIDENT

Joe Biden trying a new approach to Russia and Vladimir Putin by being hot and cold in turn; with the clatter of weapons at the eastern border of Ukraine, the West and Moscow at each other's nerves, and new spy affairs coming to light every day, and Bulgarians gladly picking sides in one direction or the other, it is worth remembering the history of this divide.

It started with the Revival. In 1844 Iliya Garashanin published the Serbian national program "Nachertaniye", where he placed Bulgaria completely in Russia' geopolitical orbit. Therefore, Serbia, he believes should seduce Bulgarians with schools, friends and assistance, so as to deter them from their Russian trajectory and pull them towards Belgrade.

## IN HIS DESCRIPTION OF THE BULGARIAN CHURCH STRUGGLES

during the second half of the 19th century, Simeon Radev draws a more balanced picture: two parties against each other, one pro-Russia, the other nationalist. After the Liberation, this divide would take its classic form of "Russophiles" and "Russophobes", and then turn into "communists and anticommunists and finally mutate into "leftist" and "rightist", and "conservatives" and "liberals". And it would go on to be of great significance for each political battle and clash of values in Bulgaria. If you start peeling off the layers of an average Bulgarian like onions, you will either find a Russophile, or a pro-European.

But let us get back to the intellectuals and the issue of the East and the West. Yes, they will argue over proportions. But ultimately, they will agree that we, Bulgarians, are both one and the other.

## I WOULD LIKE TO ITERATE THAT WE ARE NOT UNIQUE

– neither in our divide, nor in our fusion. For instance, Ivo Andrich frequently meditates on the metaphore of the Bosnia bridge, where the West starts treading the East over the "boza border" (named after the fermented drink popular on the Balkans). Just take a look at a classic case: Ukraine, painfully divided in the pro-Russian East and the pro-Polish West. And Russia itself makes no exception: just recall the dispute over "Slavophiles" and "Westerners", whose echo I still hear today. And what about Turkey? Europe against Asia, from the Young Turks all the way to Orhan Pamuk.

There is no question that in the 19th century, the West accelerated its invasion into the East. It brought with it technology, industry and intelligence. It shook the very foundations of the emotional, patriarchal character of the East. And what could the East do but modernise with the inevitable bouts of enthusiasm, resistance, confusion, shyness and shame.

## ALTHOUGH IF YOU ASK ME, THE DIVIDE

and the fusion go back even further than that. The Eastern Roman Empire, which would be called Byzantium only several centuries after its decline, was a representation of the classical West in the East. It is difficult to say which aspects of Constantinople came from the Roman Caesars and which from the Orient's wisemen, what was Eastern mysticism, what was conflict and what – a fruitful combination of the those. If you take a walk in the evening in present-day Istanbul where Europe meets Asia, and you will understand what I mean. Actually, if you are Bulgarian, you already do. You were born with this feeling.

What prevails here: conflict or balance? At a first glance, it would seem to be conflict. The Bulgarian divide is not territorial, like it is in Ukraine. It is rather biographical and moral, but no less painful. You either love Russia as a legacy or you choose to believe in Europe.

## ON THE BALKANS, ATTITUDES TOWARD RUSSIA ARE WARMING UP

from the East to the West.. Romanians share a border with the country, they lose territories for its benefit and it is no wonder they have no fond feelings for it. The Greeks and the Serbs are the ones furthest away, so they have the best relationship with Russia. Bulgaria is in the middle and the divide here is the most tangible. It appears that on Bulgarian soil, Russophiles and pro-Europeans are doomed to fight endlessly, rendering all other dispute topics meaningless.

Will this go on forever? Is there no chance of the fusion transcending the divide? Let me tell you another story about the East and the West.

## ALSO AT THE END OF THE 19TH CENTURY,

the ship cannons of the Commodore Matthew Perry forced Japan to open up to the world. The Meiji era began – a time of modernisation and westernisation. Their first steps toward a market economy were shocking, but all too familiar to us – an untamed market, corruption, dissipation, scams and whole bunch of "non-Japanese" things. The elite decided to take action. The Iwakura mission (1871–1873) set sail towards the USA and Western Europe carrying aboard wisemen and state representatives. One of their goals was to answer the question: "What is capitalism and does it have a footing in our country?"

The mission report would define Japan's development. The conclusion was to japanise capitalism. Market rules do not mix well with traditionalist ethics. The image of the entrepreneur must have the traits of a samurai: respect, self-sacrifice, care, and adherence to hierarchy. The goal is cooperation, trust, and harmony. Here is what the prominent painter Hirayama Ikuo said to me: "Our hearts and minds remained Japanese, but in science and technology we became westerners."

## THE NEXT TIME YOU ASK YOURSELF

why Bulgarians love the Japanese so much, think about that. Do we see our near-impossible dream manifested in Japan? Combining the market with honesty, and success with morals. Bulgarising capitalism. Merging the East and the West to make them work for us. And turning the divide into a fruitful fusion. ■

# OUR INVESTORS DON'T MIND INFLATION

## ELANA Eurofund



**Conservative investment strategy**



**Invests in bonds, up to 20% equity weight**



**No capital gains tax**

**12 years of average 4% return per year  
6% annual return in 2021\***

*\*Accumulated annualized return January – November 2021*

**Check with our financial consultants:**

Tel. +359 2 81 000 70 | E-mail: [mutualfunds@elana.net](mailto:mutualfunds@elana.net) | Online chat on [www.elana.net/fund-management](http://www.elana.net/fund-management)



# THE BEGINNING OF THE HOT WAR

**Greenhouse taxes, imposed by the richest, threaten to establish a new division between the East and the West in Europe not less severe than the Iron Curtain**

By **KONSTANTIN TOMOV** / Photography **SHUTTERSTOCK**

**S**till only a few think about the ideological consequences (of the polarized world – editor’s note) related to the world outlook, beliefs and social structure which would be prevailing in a country which is both invincible and in a constant state of a “Cold War” with its neighbours.”

Most probably namely these words of George Orwell, quoted from his essay of October 1945 were used to coin the term “Cold War” in the sense in which we recognize it for the past 75 years. In just a few weeks it will be 30 years from the final end of the Cold War: the fall of the USSR on 26 December 1991. However, this deeply symbolic anniversary seems to coincide with the beginning of a new conflict of a similar scale: this time

it is not due to pure ideology but it is rather related to some everyday issues, such as heating, lighting and personal transport.

**THE SHOCKING SURGE OF PRICES** of electricity, gas and other energy sources in the fall of 2021 in Europe is mostly a result of the current circumstances: a sharp soaring up of the consumption after the long shrinking because of Covid-19, and an attempt of some suppliers to cause a deficit artificially and raise prices. But it is also the result of the first clearer steps to the notorious “Green Deal” and a very eloquent warning of what could happen when it gathers enough speed.

The contribution of environmental factors to high elec ►



► tricity prices so far comes mainly to the notorious “carbon taxes” on electrical power stations – charges which were continuously rising in recent years and which now exceed EUR 60 per ton of emissions in the European Union. This makes the production of energy from coal – until recently the cheapest one but also the most polluting and noncompetitive. At least in theory. In practice, it increases the demand for relatively cleaner natural gas, raises its price and gives coal another extension.

**BY THE WAY, THIS IS JUST THE MODEST START.** The ideas of Ursula von der Layen and the other thinkers behind the “Green Deal” foresee that carbon taxes should not be limited to heavy industry and energy, as was the case so far, but they should be transferred to other sectors, including motor fuels and house heating. Such a fee, moderate so far, was being used experimentally in Germany since the beginning of the year. Experts estimate that it adds an average of EUR 400 to the annual expenses of each household. Eur 400 is not a small amount even for a wealthy country such as Germany and for lower-income countries in the EU, especially those in Central and Eastern Europe, the blow would be even more painful. Moreover, electricity charges are now being passed on to the consumers’ pockets.

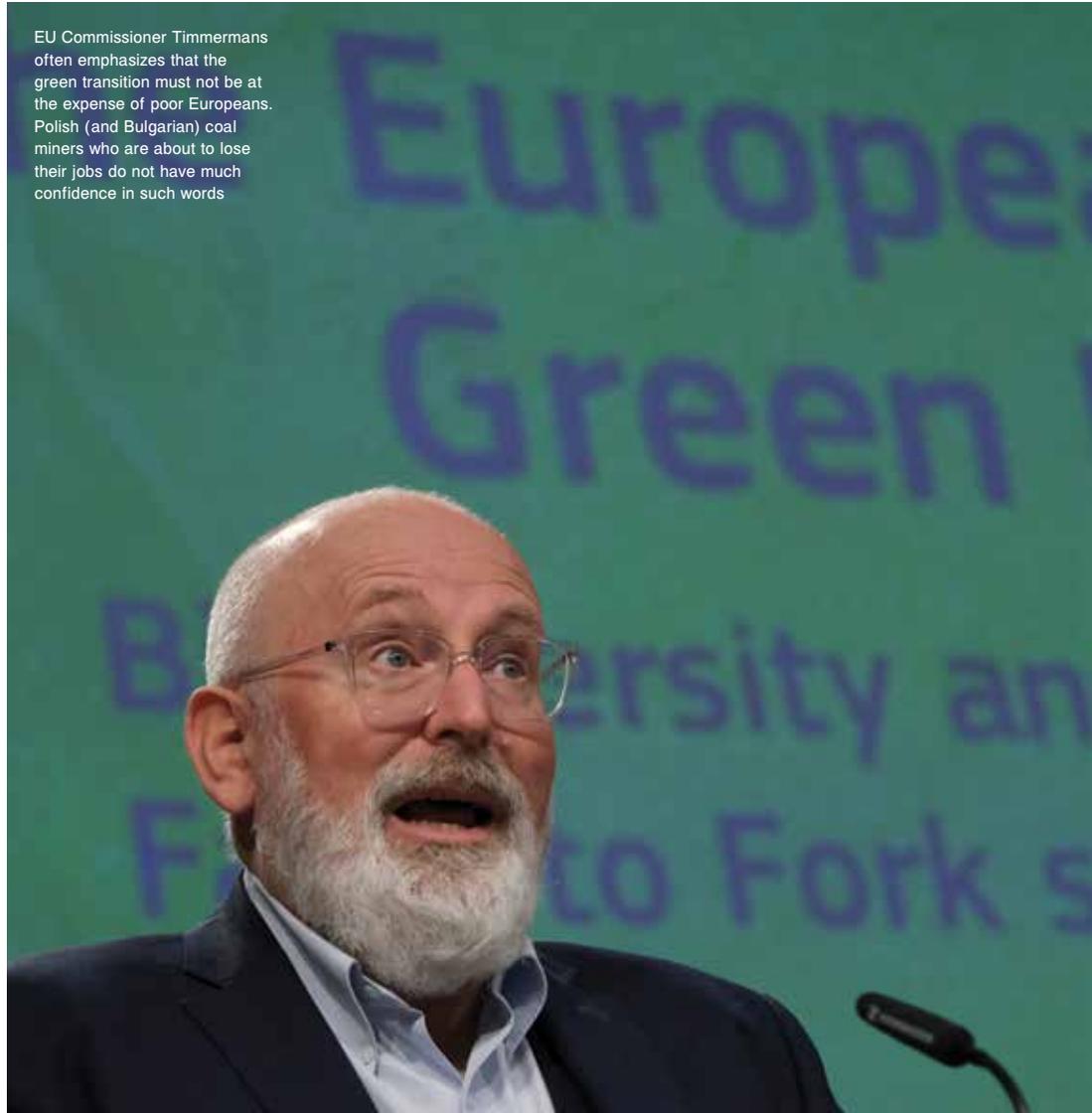
„Real carbon taxes will be the next big political battle,” Simon Cooper wrote recently in a comment for *The Financial Times*. „The 19-pounds flights from London to Mallorca are going to disappear. Our clothes, petrol, meat and coffee will become more expensive. We will have to send an army of workers to the houses in the rich world to pull out the boilers, install heat pumps and insulate the ceilings.“

Our ancestors used to spend a lot of money in a similar way on electricity, central heating and modern toilets. But they received a higher quality of life in return, while now the huge costs are to replace one working technology with another with no significant difference for the consumer.

**„IN THE RICH WORLD“ IS THE KEY PHRASE** here. As proposed, only the wealthier Europeans can afford the “Green Deal”. As the recently notorious Polish Prime Minister Mateusz Morawiecki put it, it „makes the rich richer and the poor poorer.“ This statement outraged many people in the European Commission - but even there they admit that the green transition will hit predominantly the poorest sections of the population. Von der Layen and the EU Commissioner on Climate Action Frans Timmermans have repeatedly said that all possible measures should be taken to avoid this and to help poorer households. But at least for now, it is just words.

Poland is not the only country to object the

EU Commissioner Timmermans often emphasizes that the green transition must not be at the expense of poor Europeans. Polish (and Bulgarian) coal miners who are about to lose their jobs do not have much confidence in such words



**As the notorious Polish Prime Minister Mateusz Morawiecki put it, it „makes the rich richer and the poor poorer“**

proposed structure of the “Green Deal”. Concerns about the effect on poorer Europeans were also expressed by the prime ministers of Luxembourg Xavier Bethel, Slovenia’s Janez Jansa and Latvia’s Arturs Karins. But it was Morawiecki who emerged as the main opponent of Von der Layen’s line. He also suggested, among other things, that the planned reduction of emissions by 55% by 2030 will not be distributed equally, but according to the Gross Domestic Product of the countries. This also applies to all other new directives, such as the energy efficiency of buildings. „We cannot use the same measure to reduce emissions for a building in Sofia and a building in Amsterdam,” said Michal Kurtika, Poland’s climate minister. After the Bardo summit, Hungarian Prime Minister Viktor Orban directly pointed the “Green Deal” as the culprit for increased energy prices. „The price forecasts for the whole green project turned out to be wrong,” Orban commented.



The countries from Central and Eastern Europe are natural allies in terms of this topic. However, the Bulgarian political elite was keeping silent for a long time and agreed in advance with everything which came from Brussels. It was only after the Bardo meeting, President Radev announced that Europe needs the “Green Deal” but it should be unfolded “very carefully so that countries like Bulgaria would not lose their competition and pay a very high price.”

**MANY WEST EUROPEAN POLITICIANS** and commentators are of the opinion that the green transition is to be the same for all in order to be effective. This is mildly speaking a hypocritical position.

Let’s take Poland for example and its highly-dependent on coal energy sector. Poland is among the leaders in greenhouse emissions in Europe but it is hardly the champion. Its total CO2 emissions are lower than those of France and Germany. And the emissions per

capita (8.4 tons) are much lower than those of the Netherlands (10.3 tons), Germany (9.7), Finland (8.5) which are all countries strongly supporting the “Green Deal” in its current form. The emissions of Bulgaria per 2017 data amount to 7 tons per capita.

**BESIDES IS IT RIGHT TO SEE ONLY THE PRESENT?** Scientists comment that the so called anthropogenic period during which mankind affected climate began with the start of the Industrial Revolution in the 19 c. Today’s wealthy nations are such namely because they have entered this revolution earlier, or otherwise because they have been throwing up greenhouse emissions for the longest. Countries like Germany, France, Great Britain have started to pollute strongly a whole century before industrialization spread to countries like Bulgaria. They carry out the green transition currently using the wealth accumulated as a result of this pollution.

Norway, the emblem of all environmentalists shows off today with its record number of electrical vehicles and its clean hydroenergy but who knows why it fails to point out the fact that it buys these vehicles using the billions accumulated from the export of oil which is still going on to the present day. Last year the Norwegian oil sector has contributed to 14% of its GDP, 20% of the treasury revenue and 39% of the country’s export.

**EASTERN EUROPE, HOWEVER,** already gave its considerable contribution for the decrease of the emissions by losing an important part of its industry and population during the last three transitional decades. Poland’s current emissions amounting to 319 million tons, are more than 50 million lower than those in 1990. Bulgaria’s emissions have diminished by 39.8% for these three decades which is the fifth best indicator in the EU. The top six comprises of countries from the former Eastern Bloc. Meanwhile, Germany with enormous investment made in renewable energy managed to shrink its emissions by less than 22 percent, Sweden – by 12.5%, France – by 12%. The United States which since Biden’s entry in the White House emerged as the second pillar of the “green” transition decreased their emissions by 0.4%. The emissions of Norway increased by 2 percent, of the Netherlands – by 8 percent, of Austria – by nearly 15%, of Spain - by 23%. And emissions from China where Western Europe exported much of its polluting productions soared by 353%. All this data is taken from The Emissions Database for Global Atmospheric Research, the European Commission’s favorite source.

**WHAT WAS SAID SO FAR** does not diminish the need of change in our way of life. Even if we disregard the threats of the global warming, it is obvious that considering the rapidly growing number of humans we will have to learn to use less resources in a more effective way. And this undoubtedly will be accompanied by a substantial price. But this price should at least seem fair: it should be different for the big and small polluters, as well as for the rich and the poor. And it should not go into the pockets of the notorious 1% but for creating options. The opposite experience as Simon Cooper reminds, was helpfully tested by Emmanuel Macron in France. Macron tried to introduce a fuel tax which mostly affected the poor offered them no transport alternative, neither was it discussed in advance, so that it did not become clear what the money would be used for. The „Yellow Vests“ very quickly showed the French president whether such a policy worked. Unfortunately, officials in Brussels are conveniently far from their constituents. ■

Dnes.bg 

now you know

SPORT WORLD BULGARIA NEWS TECHNOLOGIES BULGARIA SPORT WORLD BULGARIA N  
OLOGIES BUSINESS CULTURE SPORT WORLD BUSINESS TECHNOLOGIES BUSINESS CULTURE SPORT WOR  
GARIA NEWS TECHNOLOGIES WORLD SPORT NEWS TECHNOLOGIES BULGARIA NEWS TECHNOLOGIE  
ULTURE SPORT WORLD BUSINESS TECHNOLOGIES CULTURE SPORT WORLD CULTURE SPORT WORLD BUSINE  
SPORT WORLD BULGARIA NEWS TECHNOLOGIES BULGARIA SPORT WORLD BULGARIA NEW  
GIES BUSINESS CULTURA SPORT WORLD BUSINESS TECHNOLOGIES BUSINESS CULTURE SPORT WORLD  
GARIA NEWS WORLD BULGARIA NEWS WORLD



# TRUTH OF THE HIGHEST INSTANCE

**Can tackling fake news actually bring us the worst censorship ever?**

By **KALIN NIKOLOV** / Photography **SHUTTERSTOCK**

Every year, analysts at the Danish Saxo Bank make their 'scandalous predictions': development scenarios that are unlikely, but still entirely possible, and that would transform society. One such prediction for 2021 states that Facebook, Google and other Internet giants will find a technological means to deal with fake news - for example, through blockchain technology that sifts the

truth from lies. "Companies like Twitter and Facebook are investing heavily in this blockchain technology... Alternative news sites emphasising conspiracy theories such as QAnon, coronavirus disinformation, falsified evidence of electoral fraud, etc. will suddenly become inaccessible on major platforms. Reality wins, halls with curved mirrors lose," writes Anders Nysteen, the author of this forecast. ▶



► **TO HIM, THIS SOUNDS** like a real breakthrough, a big step forward for society. But for many others, such a development is more like a script for an apocalyptic, anti-utopian movie. Which, on top of everything, is gradually starting to come true.

Earlier this year, Facebook announced a new spectacular campaign against fake news, promising not only to block their spread, but also to “cut off economic incentives” for their appearance and “help people make more informed decisions.” The social network removed more than 12 million posts, including from its Instagram subsidiary, containing “lies about Covid-19 and vaccines.”

An information-laden reader probably wouldn't pay much attention to this news: after all, isn't that what we've wanted from Facebook in recent years? In 2017, the team of Andrew Guess from Princeton University conducted an ambitious study of fake news and found that it is from Facebook that the largest number of references to unreliable news sources comes - as much as 15% (against the ridiculous 6% references to reliable sources). Now the company is finally taking action - better late than never, right?

## WELL, NOT EXACTLY.

Algorithms to recognise counterfeit photos and videos will no doubt be needed. But what gives Facebook and other internet giants the right and authority to be the guardians of the truth? Does Facebook have the knowledge to determine which claims about Covid-19 are false in order to eliminate them? After all, even the organisations we have set up for this purpose have become quite confused by this pandemic. It's not dangerous, just wash your hands; no, it is dangerous and urgent action is needed; no need to wear masks; masks must be worn; it is best to even wear two; keep a metre and a half distance; observe a distance of two metres, observe a distance of six metres. These are all tips from the World Health Organization. How can an Internet company, whose staff is mainly programmers, find out what is a lie and what is true? This is the same Facebook that has for years responded to your reports of racial or gender-based insults, and even outright threats of violence, with the insane: we looked at your tipoff, found no violation of our policy, but thank you anyway. And helping people ‘make informed decisions’? We saw it in action last year: a link to an interview with the head of the Department of Epidemiology at Stanford University. And a stern warning from FB that you are about to read information containing unveri-

fied and unreliable claims about Covid-19. On the one side stands a scientist of international renown. On the other - an algorithm written by some bloke in California wearing a sweatshirt and shorts.

## BUT LET'S LEAVE THE SPECIFIC EXAMPLES

and think about the essence of the problem. What does blockchain fact-checking technology mean? It means that the truth is determined by the majority. Truth in itself is a concept that is very difficult to define. But none of the attempts to determine it says “what most people think.” In fact, most often the truth is just the opposite. Schopenhauer, perhaps the most suitable philosopher for modernity, used to say that all truth passes through three stages. First, it is ridiculed. Second, it is violently opposed. Third, it is accepted as being self-evident. Seventeen centuries earlier, Tertullian wrote something similar: “The first reaction to truth is hatred.” Here is Nietzsche: “There are no facts, only interpretations.”

The whole progress of mankind since the Enlightenment has been based on the expression of alternative opinions, on the challenge of the generally accepted, on the offering of hypotheses that are initially shocking. Are we going to give up the most effective tool of progress in favour of some algorithm?

The traditional media - first newspapers, then television - had developed some workable method of dealing with fake news, compelled by their responsibility to the readers and the viewers - if you lie and deceive them, they will stop reading and watching you. But what responsibility does Facebook have? The social network has always tried to present itself as an innocent mediator which nobly helps the news to reach people more easily. The mediator is not responsible for the content, right? By the same logic, the company has stubbornly refused to even negotiate to pay any share of its advertising revenue to the media, through whose links it earns it. In February, it went so far as to block news links across Australia after lawmakers there forced it to pay such a share. For the first time ever, Facebook had a head-on collision with an entire government, from the G20 at that. This time it didn't judge its strength, and eventually had to back down. But this is a concession in only one area, and not all governments the world over have the power and will to act like Australia.

## AND IF YOU DOUBT THE POWER OF FACEBOOK



pose whole countries, here's just a fact underlined by Tim Robinson in his new book “Value: What Money Can't Buy You”. At the time, the Stasi, the GDR's sinister secret police, had files for 5.6 million people. Today, Facebook has files for 2.6 billion. Besides, the Facebook files are incomparably bulkier: the social network knows who you are, what you do, where you are at any time, what photos you sent to your mate at 2 o'clock in the morning. It also knows what you're talking about, even though this has been subjected to heated debates for years. Make an experiment: open FB on your phone while talking to someone, and then include in the conversation a brand you've never mentioned before. And then pay attention to what targeted ads the social network will show you.

This distracted us a bit from the topic of fake news. But the truth is that the task of dealing

Social networks have long been seen as an instrument of freedom of speech and information. Recently, however, attitudes are changing



with it should not be in any way given to Facebook, Google or another technology company. And it should not include jamming, deleting or blocking. There is only one way to deal with fake news, and it has been around for centuries. This method is called 'education'. With it, no one has to tell us what is true and what is false. We can judge it for ourselves.

## **BUT THIS WAY IS INCREASINGLY PROBLEMATIC THESE DAYS.**

The number of educated people is at a record high - but the quality of education is not growing in parallel. In many countries it is becoming increasingly unaffordable as a price (see page 77). And besides, it's getting more specialised.

The level of general knowledge among educated people is constantly dropping. Robert Proctor, a professor of history at Stanford, speaks of "a golden age of ignorance". According to him, we live in an era that is a mirror image of the Enlightenment. He has called this era "the endarkenment".

The blame for this goes mainly to the much specialised education, which is actively imposed all over the world. Polythematic education, emphasising the creation of a rich general knowledge - what the Bulgarian was in the past - was totally rejected as impractical and outdated. International studies such as the sensational PISA (conducted by the OECD - an organisation without any mandate and authority in this field) further strengthen the specialisation, the tests, and the provision of the so-called 'practical knowledge'. This approach

may create good workers - but it also creates many bad citizens, wrote more than 400 world intellectuals and educators in an open letter to the OECD. The rich general knowledge is the way to orient ourselves in the world, to sift the truth from the lie, to make a critical analysis of the facts, instead of 'believing' in one or another postulate.

## **OF COURSE, BULGARIA, WHICH SPENDS**

a record high percentage of its GDP on its poorly functioning administration but a record low percentage on education, must first solve more immediate problems. Such as the emerging dramatic shortage of teachers in 5-10 years. But the fundamental question of the purpose of modern education should not be postponed, either. The path to truth passes only from there. ■



# BULGARIA AND THE POST-DEMOCRACY

Why was social democracy unable to take advantage of the financial collapse? Because it had already accepted the neoliberal financial system, and could not criticize it

By **PROF. COLIN CROUCH** / Photography **SHUTTERSTOCK**

When writing „Post-Democracy“, my arguments were mainly around Western societies with long traditions of democracy, and there is a very interesting question as to how we apply these ideas to countries like Bulgaria and the others in Central and Eastern Europe. Because there are very interesting similarities despite the big differences.

What I meant by Post-Democracy was a situation in which the democracy seems to go on: there are elections, governments fall, there is big public debate - but somehow it doesn't mean very much. The real decisions are being taken elsewhere and democracy almost becomes a show.

**I DID NOT ARGUE THAT THE COUNTRIES** of Western Europe and North America are already in state of Post-Democracy. I argued that we might be on our way towards it if we're not careful. What is the cause of Post-Democracy? It's not anyone's fault. I don't think there is some big conspiracy to undermine democracy. But what has happened are two main things: first, the globalization of the economy means that the governments at national level can't do very much to affect things; that the big important economic developments in the world are beyond the reach of national democracy. Secondly - looking now at Western Europe in particular - people in the past more or less knew which party stood for them because the parties emerged out of a certain history. Now, as time has passed, that history has disappeared. It becomes memories of what happened to grandparents and so modern parties do not give people many clues as to who they might be politically and that makes it difficult for people to have strong political identities.

**DEMOCRACY DOES ASSUME THAT CITIZENS** are very well informed. But it's not so easy to be a well informed citizen, actually. You need to be strongly motivated and you need to have flows of information that are open and free. And where for example it's not possible for very wealthy people to control information. In many societies so often now they do control it and that is clearly a danger because it means we don't really get the chance for genuine choice and genuine change.

All human societies are likely to become full of conflict and chaos, and we must have rules of various kinds to stop that happening. The message of democracy is that if we all get a chance to participate in choosing governments are making big decisions, then we will have less

Parties have now become little teams of leaders **who would like to get elected and so they appeal to voters**

need need for recourse to extreme action and violence. And in general, if you look at Western Europe, Central and Eastern Europe and the United States, they're not very violent societies. Occasionally we get violence and people unable to control their anger. But most of the time we do actually manage to deal with our conflicts.

**POLITICAL PARTIES ARE FINDING IT INCREASINGLY DIFFICULT** to cope with conflicts, partly because parties often have a history that comes out of a society of the past. In Western Europe, we had conflicts around the class structure of industrial society - but we no longer have an industrial society. We had major conflicts about religion. We no longer have much interest in religion. So the major things that produced political identities are very, very weak. And in Central and Eastern Europe following the collapse of the Soviet Union it's been very difficult for people to find identities, and so we find parties coming and going, lasting for a few years then disappearing and collapsing - because the people can't really make a strong, emotional and intellectual link to any particular party.

**PARTIES HAVE NOW BECOME LITTLE TEAMS OF LEADERS** who would like to get elected and so they appeal to voters. Their relationship to voters becomes like a firm trying to sell a product. The politicians don't understand people, the people don't understand the politicians. In the romantic theory of democracy that we have in the West somehow the parties come out of the people and they express the will of different parts of the people. But increasingly that's not what happens. It works the other way round - it's the



leaders who themselves feel very detached from the people. They give messages to the people but there is this lack of real relationship between the politicians and the people.

It's not the fault of politicians. Society has changed in ways that makes it extremely difficult for them to behave any differently. My ideas are not an attack on the political class really. They are just saying it's become difficult for all of us.

Obviously the idea of Post-Democracy assumes you've had a history of a stronger democracy that then becomes weak. And now clearly that doesn't really apply to the countries that are still relatively young as democracies. But I think the similarity between the two is that in the old democracies old political identities are wearing out and decaying whereas in the new democracies, you haven't had a chance to acquire them yet. Now, it may be that in the Society of the 21st century it is very difficult ever to get those loyalties and identities in which case we should have to start building parties in a different way.

**WHAT IS THE ROLE OF THE WEALTHIEST PEOPLE?** Philanthropists are a special kind of people who use their wealth to do good things and some of them do wonderful works, but in general something that does go on uninterrupted by political change is the emergence of very, very wealthy people. At the moment within most countries of the world, there is an increasing gap between the very rich and everybody else. And if you are very wealthy you can use that wealth to buy political influence. And once you've got political influence, you can use that to ensure you get more wealth. So there is a kind of spiral that

goes on. And if the other actors in democracy - like trade unions or churches - have become very weak, then very wealthy individuals can amass resources used for politics, and take on even greater significance. That is a very important aspect of what's happened.

There was a part of society that is very conservative and does not really like a lot of the liberal changes that have happened in the last 30-40 years, depending on which country we talk about. For example, the liberated, improved role for women, improved rights for ethnic minorities and also recognition of the rights of people with problematic sexual identities. For some parts of the population, this was very hard, and I think they were willing to put up with it and to accept it because life was going on relatively well, they were getting a bit wealthier every year... But then suddenly that big collapse of the financial system in 2008 led some of these people to say that actually the system is not looking after us in the way we thought it would, so perhaps we don't like this system. And then they looked around and they found there were people willing to say yeah, you don't have to accept all this. I think the nationalism became important partly because globalization seemed to take things away from people at a level they could understand. This applies mainly in Western countries, although people in the East have responded to it as well.

**WE'VE HAD THESE VERY LARGE NUMBERS** of refugees coming across from conflicts in North Africa and the Middle East which has also brought in very small number of people terrorism. And so I think a lot of people say look, let's

just lock ourselves up in our nation. Let's close ourselves off from the World, close ourselves off from immigrants. Politicians who were giving that sort of message found an willing audience.

Why was social democracy unable to take advantage of the collapse of the financial system? I think the answer there is that most Social Democratic parties, especially those who are in government, had accepted the neoliberal financial system. They weren't in a position to criticize it, they had already accepted the liberalization of the finance. So they were sort of stuck, unable to move, and then there were people on the nationalistic and socially conservative right who were able to say: look, we've got a message for you.

**WHAT ABOUT THE EFFECTS OF COVID?** So far, we don't really know what happened. But it seems that parties, governments, people of all different views have seen Covid crisis as reminding them that we are dependent on each other. We are dependent on public services, especially the health services. We've also seen during the pandemic how we've been very dependent on a lot of people who do jobs that are normally not highly regarded: care workers, people who deliver food, the whole load of people who normally we see as unimportant. Now we've seen their importance, we've seen the dependence that we all have on each other. Right across the political spectrum one sees a move towards more acceptance of public service and, also, less acceptance of inequality. I think people are less tolerant of inequality now, so there may be very important changes coming out of Covid, which actually may make us a better society. ■

# FAKE AND 'GENUINE' NEWS

**Can traditional respected media be a greater threat to democracy than fabrication and misinformation?**

By KONSTANTIN TOMOV / Photography SHUTTERSTOCK

'Publish, and be damned!'

The original phrase was uttered by the Duke of Wellington to a publisher who blackmailed him for money so as not to release the spicy memories of one of his one-time lovers. But in the twentieth century, James 'Scotty' Reston, one of the legendary editors of The New York Times, breathed it a new life. He had hung it over his desk, but with a new meaning: from the journalist's point of view, 'publish and be damned' means to print the facts without considering the consequences. If you think about it, this is the only way for journalism to play the role of 'guardian of the guards,' a side reprovor of the mistakes of important public figures. This role is one of the two strongest pillars of a democratic society, along with a fair and independent judiciary.

**BUT 2020 THREW A HUGE QUESTION MARK** on this. The coronavirus, Black Lives Matter, #MeToo, the US presidential election, growing differences within the EU, Brexit: coverage of these events in many of the world's leading media makes us wonder if they have not replaced 'print the facts, not caring about the consequences'

with the far more convenient 'print your opinion without caring about the facts.'

One of the world's most respected financial publications wrote on its front page that Donald Trump's claims of electoral manipulation had been 'proven to be fabricated.' Less than two hours had elapsed between this allegation and the filing of the claims in question. It is clear that this is an opinion, not a 'proven' rebuttal.

**THE NEW YORK TIMES, THE PULITZER PRIZE MOST-AWARDED PUBLICATION** ever, a long time symbol of free speech and progressive journalism, recently fired its experienced reporter, Donald G. McNeill Jr., for using the N-word during a trip with students to Peru. It later emerged that one of the young men had told the reporter about a classmate who had once used the same word in a video and asked him if the classmate in question should be expelled for it. McNeill repeated the word as he answered. However, many students heard it and complained. McNeill initially dismissed the allegations as ridiculous. But then 150 of his own colleagues in the NYT signed a petition urging him to apologise. McNeill was eventually ►





► fired. The defence of indignant intellectuals like the writer Rod Dreher, who described McNeil's dismissal as 'one of the most shocking examples yet of cancel culture', did not help. The objections of commentators such as Charles CW Cooke that 'there is a profound difference between using a racial epithet in the course of a discussion about that racial epithet's use, and using a racial epithet to diminish or to wound someone' did not help either. Nor did the comment of his own colleague Bret Stephens in defence of McNeill, which the NYT refused to publish. Editor-in-Chief Dean Baquet said that the speaker's intention doesn't matter when it comes to racist epithets like the N-word.

It is the same newspaper in which, a decade ago, African-American novelist Jill Nelson called for an end to satanising the word 'nigger' because it is 'part of our lexicon.' 'What's next? Substituting orange for red in a painter's work because some observers find red too aggressive?' Nelson asked at the time. But the NYT of 10 years ago was clearly quite different from the NYT of 2021.

**BY THE WAY, THIS PHENOMENON DOES NOT ONLY APPLY** to The New York Times. Stan Wisnowski, The Philadelphia Inquirer's long-time editor-in-chief, was forced to resign after he published an article entitled Buildings Matter, Too in the midst of the BLM riots - a very sensible call to stop the vandalism and burning of buildings which are cultural monuments. The newspaper's publishers then apologised for this 'horribly wrong' interpretation of events. At the same time, the NYT fired its editor, James Bennet, for a leading article in which he recommended that the military intervene to stop looting and vandalism.

However, these glaring examples of violent political correctness are not the main problem of modern journalism, but rather one of its numerous manifestations. The main problem, as outraged Harper's Magazine publisher John R. MacArthur wrote, is that 'there no longer appears to be a consensus about what role journalism plays either in a democracy or a dictatorship, or why anyone with a pluralistic, oppositional or reformist bent would want to make a career in newspapers or magazines.'

**EVEN ABANDONING POLITICAL CORRECTNESS** and the culture of exclusion would not save the profession, MacArthur suspected in an article entitled The Decline of American Journalism, carried by The Spectator magazine. Its main problem is not in them, but in the growing categoricalness and one-sidedness, and in the increasingly rare search for the 'other side of history'. If in the past the left-wing editions offered alternative points of view, today, as strange as it is, this function is performed by the right-wing press. It was Murdoch's tabloid The New York Post that published the defence for McLean by Bret Stephens, previously removed from the NYT. And last spring, David Katz, founder of the Yale-Griffin Prevention Research Center at Yale University, was forced



to turn to Fox News, because all 'progressive' media refused to disseminate his point of view, that the initial measures of panic around the coronavirus bring more harm than the infection itself. Katz was then invited by Bill Maher on HBO, who asked, 'Why Fox, Doc? You don't look like a Fox- type of person to me?' To which Katz replied in earnest: 'Because only they agreed to listen to me.'

So far we have talked about America, but the same phenomena are observed everywhere else - from Britain and France through Eastern Europe to the Far East.

In Bulgaria, people from the older generations are well familiar with the feeling that the newspaper tells you what to think, instead of acquainting you with the facts. The only shocking thing is to see the same today from Western publications, which we have associated for so long with free thinking, the search for truth and the highest standards in journalism. How did all that happen? The main reason is, of course, economic.

**THE ROOTS OF TODAY'S PROBLEMS** in journalism can be traced back more than a century: to the time when newspapers and magazines began to be supported by the advertisers rather than by their cover price. Previously, the only factor on which their profits had depended was the readers' trust, which gave them enviable independence. With the advent of advertising, the loyalty of publishers had to be divided into two - the readers and the advertisers. The most respected editions managed to maintain a clear line between the two; in most others they gradually began to mix. And then came the digital age. Revenues from sales of print newspapers and magazines collapsed; powerful intermediaries such as Facebook and Google intervened in the advertising revenue. Many of the major editions found themselves on the brink of bankruptcy or even beyond; many lost their independence.

**THE NEW YORK TIMES ACCEPTED A loan first**

and then an impressive investment by Mexican business magnate Carlos Slim; The Washington Post is now owned by Jeff Bezos, the founder of Amazon; the British Economist has as major shareholders the heirs of Gianni Agnelli, the owner of Fiat; The Financial Times was sold by Pearson to Japan's Nikkei. The Atlantic is owned by Lorraine Jobs, the widow of Steve Jobs. Forbes is in the hands of a company from Hong Kong, allegedly backed up by Chinese capital. The competitive Fortune was bought by a Thai businessman. The Bill and Melinda Gates Foundation has distributed more than USD 250 million in media grants across the spectrum from the BBC, NBC and Le Monde to The Atlantic and The Guardian.

In the past, the leading media have also been in the hands of large corporations - but usually corporations in the same sector, for which publishing is the main activity. It is now the first time such a large number of publications have been owned by giants from completely different areas of the economy. Even if there is no direct conflict of interest, how often would such publishers prefer to put pressure - public or private - to protect their core business instead of defending the work of their journalists?

**RECENTLY, IT HAS BECOME FASHIONABLE FOR** all the problems in society to be blamed on fake news. But a much bigger problem could be the 'right' news released by publications that enjoy the public's trust by default. News that imposes ready-made points of view, in which there is no 'other side' and which does not tolerate any dissent. If that's the future of journalism, people like John MacArthur are right to talk about decline. But there is a reason for optimism: people still need impartial news. A good proof is The Spectator, a conservative edition with a rich history, but with a moderate coverage in recent years. In 2020, it suddenly improved all circulation records - simply because it tends to show different points of view. The need for real journalism has not disappeared at all. And if conventional media can't satisfy it, others will nestle in. ■



# THE DAY OF THE RADICAL

## It was only a matter of time before Twitter culture became Twitter politics

By **BOYKO VASSILEV** / Photography **SHUTTERSTOCK**

It so happened that Gladstone and Churchill fell victim to the 'war on monuments' that broke out during the Black Lives Matter protests. History winked at the Bulgarians in its characteristic knowing way. Because in the Bulgarian memory the two left a completely different trail - Gladstone as a friend, Churchill - as... not quite a friend.

During the 19th century, Liberal William Gladstone defended the April Uprising condemning the Ottoman Empire over the 'Bulgarian atrocities' at a time when there were rows at English tea parties between those 'for' and 'against' the Bulgarian independence. Against were the poet Tennyson and Gladstone's archrival, the conservative leader Disraeli. Bulgarian poet and writer Ivan Vazov dedicated a harsh epitaph to him, which would not stand the test of modern political correctness:

Lord Beaconsfield died,  
Sank in the dark darkness,  
And everybody laughed heartily,  
From Londra (London) to Batak.

### DURING THE FIRST WORLD WAR,

the then First Lord of the Admiralty, Winston Churchill, hated Bulgaria because of the failed landing at Gallipoli. If Sofia had not sided with the Germans, there would have been no need for a breakthrough in Turkey. Britons, Australians and New Zealanders would not have blooded the beaches of the Sea of Marmara, the military genius of Mustafa Kemal (the future Atatürk) would not have shone in Çanakkale and Churchill would not have borne the disgrace of one of the most shameful defeats of the Crown.

That is why there is Gladstone Street in Sofia. That is why during the Second World War, Prime Minister Churchill uttered some of his most bitter words about Bulgaria, although, to be honest, most of them turned out to be 'fake news'.

Now Gladstone and Churchill are in the same bowl. The Scottish liberal was the son of a



slave trader and, as a young man, spoke in a politically incorrect way. The half-American conservative made racist statements. What now? The revolutionary masses have a solution: remove their monuments.

### I UNDERSTAND THE RIGHT-EOUS ANGER

after the murder of George Floyd. As I do the reaction over the monuments to Confederate figures in the United States. I also know about Edward Colston of Bristol: he himself traded in people, many of whom died, although monuments should be removed in the wake of a public debate and consensus, after all. But Gladstone did a lot for British democracy. Churchill guided it through its darkest hour, World War II. Yes, there are nuances in their biographies. Sir Winston, for example, was at war with Mahatma Gandhi. Today, however, both Gandhi and Churchill are accused of racism. The twists and turns can make you dizzy.

NOT ONLY BULGARIAN SCEPTICISM finds this strange. Imagine judging history from the standpoint of modernity. There are no innocents here. Americans will discover that their Founding Fathers, such as George Washington and Thomas Jefferson, also kept slaves. The British will face all the sexual quirks of geniuses like Byron and Shelley. The zealots of democracy will be confronted with slavery in Ancient Greece, which invented it. And so on, to the end of the world.

I am sorry to repeat banalities. There is no news in the fact that history contains nuances and context, that we cannot analyse yesterday through today's glasses.

I also know that I will not gain many friends with an objective and complex analysis of anything. Because it is not the time for nuance or moderation.

### THE DAY OF LOUD YELLING HAS COME.

From one entrance, Trumpists are invading, drinking bleach and 'clearing' states of the Democratic Party. And on the other, the radicalised student campuses and far-leftists who have replaced class with race. They do not allow anyone who does not think like them to speak. They revise Uncle Tom's Hut and fight with Gone with the Wind. Writer Eric Weiner told me that Donald Trump did not mind other people's opinions, as long as it was like his. But what is the difference with the student's No Platform movement? You don't think like me? Then I won't listen to you.

That's the way it is in the world of Twitter. He who shouts the loudest nonsense will be heard. From now on, he can do whatever he wants. Including the opposite of what he was shouting. His echo balloon will support him, even if he injects himself with deodorant.

### IT WAS A MATTER OF TIME

for Twitter culture to become a Twitter polity. Here it is, in all its glory. There is nothing to wise over balances and analyses. We will yell, we will insult, we will swear, we will knock down statues, we will provoke, we will invent nicknames for our opponents, and we will incite the crowd. This is liked in the 'feed'. As in the joke about the lorry driver who was asked, "Why are you frying bananas?" He replied, "You fry what you drive."

Although in different places in the hearts of the Bulgarians, Gladstone and Churchill had something in common: the graceful use of the language. Sir Winston even received the Nobel Prize in Literature. Would they like today's rude shouting? I do not know. How would a true liberal and a true conservative feel on Radical Day? I can't bet on anything anymore. The world of Twitter is colourful to watch. What will it be like to live? I am afraid to imagine it. But probably because I have no imagination. ■



# COMMENT

## DIGITAL MEDIA REVOLUTION WILL ACCELERATE

The EU wishes to accomplish the same objectives as Donald Trump does – but with opposite methods



By GEETHA RANGANATHAN / Photography SHUTTERSTOCK

Covid-19 has savaged the media industry by shutting down theaters, closing theme parks, derailing sports and blunting ad spending, with a recovery unlikely to be either quick or easy. The pandemic is exacerbating problems for companies that were highly dependent on traditional TV models and that may have waited too long to develop streaming strategies, especially as cord-cutting accelerates and further pressures affiliate fees. TV ad spending in the United States is expected to fall 17% this year and it may take 2-3 years for theme park attendance to normalize. Most companies see the writing on the wall- the only way to survive and future-proof their business model is by shifting their resources to streaming- a high-growth but also highly unprofitable business. Entertainment companies will be valued based on the growth outlook for their digital business rather than traditional revenue and cash flow metrics.

### PAY-TV

The pay-TV bundle, the bedrock of the global media ecosystem is in rapid decline as cord-cutting accelerates. Global revenue will slump

25% by 2025 vs. a peak of \$202 billion in 2016 as viewers migrate from traditional-TV services to cheaper streaming options such as Netflix and Disney+. In the U.S., the traditional TV package bundle has hit a point of no return, with the slow drip of video losses turning into a deluge as we project the industry will lose over 50% of its 100 million-plus customer base over 10 years from 2014-24.

### STREAMING

The pandemic and its economic repercussions will expand the potential market for streaming, accelerating the shift of viewers from traditional-TV services to cheaper streaming options, in our view. Stay-at-home has been a streaming boon, leading to what we believe are lasting changes in consumer behavior. The number of streaming subscriptions will nearly double to 1.2 billion by 2025 vs. 2019 with Netflix, Disney+ and Amazon Prime controlling half of the world's subscriptions. Streaming revenue will follow suit, doubling to \$100 billion by 2025 with the U.S. and China accounting for over half of that global total, according to Digital TV Research.

### ADVERTISING

The digital revolution in media will likely continue to accelerate in the next few years. This has been the most pronounced in the \$550 billion global advertising market where digital revenue topped traditional TV for the first time in 2016, as large players such as Facebook and Google captured ad dollars from legacy platforms. While the trends seem somewhat dire on the linear TV advertising front, big media companies such as Disney and ViacomCBS may be able to salvage 50-70% of a projected 25%, or \$15 billion, wipeout of U.S. traditional-TV ads over the next several years, based on our scenario analysis, via their ad-supported video (AVOD) services such as Hulu and Pluto TV.

### BROADBAND

Covid-19 has cable broadband soaring and may drive a 30% increase in new users gains in the U.S. Gains have accelerated as wireless-only households shift to fixed broadband to meet data needs. The pandemic has been a catalyst for households to abandon pricey video packages and embrace the broadband-only option, a move that could not only fuel subscriber growth but also may boost revenue since unbundled higher-speed tiers are typically more expensive (ultra high-speed plans are 80% costlier vs. standard plans). High-margin data is more than offsetting the less-profitable video business, spurring high-single-digit or even low-double-digit Ebitda gains (vs. mid-single-digits previously).

### THEATERS AND BOX OFFICE

The domestic box office is down almost 80% year-to-date and all attempts at a recovery have been thwarted as studios push out releases to 2021 and beyond and even remove some of their titles from the theatrical slate for a streaming debut like for instance "Soul" skipping theatrical for a Disney+ release. The industry has run into a classic chicken-and-egg problem: theaters have been unwilling to open without studios committing to release new products, while studios are holding back until they see signs of demand. The outlook is getting murkier not only because of the issues posed by audiences remaining hesitant to return to cinemas but because of existential concerns caused by studios fundamentally rethinking their film strategy. A key question is whether theaters will survive and be fully operational when studios and audiences are ready to come back. ■



# TECHNOLOGY & LEISURE

**64**

## FAREWELL, MY LOVELY

ARE WE APPROACHING A TIME WHEN OWNING A CAR WILL NOT BE AFFORDABLE FOR MOST EUROPEANS? 10 FACTORS THAT PUSH US THERE



**68** THE INVISIBLE THREAT

**72** THE GREAT GERMAN REVOLUTION

**76** THE BEST DISCOVERIES OF 2021



# FAREWELL, MY LOVELY

Are we approaching a time when owning a car will not be affordable for most Europeans? 10 factors that push us there

By KONSTANTIN TOMOV / Photography SHUTTERSTOCK



**A** car for every purse and purpose: under this motto, Alfred P. Sloan once turned General Motors into the world's largest carmaker - and the car itself into something widely affordable. Owning a personal vehicle has given people unprecedented freedom, fundamentally changed the labour market, increased competition between employers, and helped develop entirely new industries such as mass tourism. But today it seems that personal car has sang its swansong. Simply because Sloane's motto is no longer valid.

Car prices have risen dramatically in the last ten years. If in 2010 a small city car in segment B (Ford Fiesta, Opel Corsa) cost about BGN 20,000 (10,000 EUR), today it is over BGN 30,000. In the C-segment, called the "Golf class", until recently you could have a well-equipped car for 30,000 levs. Now the entrance price is about 40,000 levs. The most affordable sedans in the D segment used to start from BGN 40,000, now they are over BGN 50,000. And so on.

The rise in car prices is many times higher than the usual course of inflation. And, according to the unanimous opinion of experts, this is just the beginning. Here are the ten main factors that will shape the future of the personal car.

**ECOLOGY.** The most significant reason for the price increase is the attempt to reduce harmful emissions. In the name of this goal, three decades ago the European Union created the so-called "European emission standards". It started with Euro 1 in 1992. Now Euro 6d is in force. European standards limit the maximum amounts of harmful substances emitted by cars - especially nitrogen oxides, carbon monoxide, fine particulate matter. For the years from Euro 1 to 6d, the permissible concentrations decreased several times. To cover them, manufacturers have to use new and new tricks - catalysts, injection of urea in the exhaust gases of diesels (so-called AdBlue), the introduction of a filter for particulate matter ►



► for gasoline engines (GPF) as well, and so on. Naturally, each additional technology makes production more expensive. And there are separate ceilings for the so-called greenhouse gas emissions - the amount of CO2 released. Under the current regulation 2019/631, in force since January 2020, they are limited to 95 g/km on average per car. Manufacturers who exceed this pay fines - 95 euros for each additional gram, for each car. This will explain to you why larger engines suddenly disappeared from mainstream cars, and entire brands, such as Infiniti, left Europe. And why everyone is using three-cylinder turbo engines instead of simpler and more reliable naturally aspirated powertrains.

But things will only get more complicated. From 2025, the next standard will come into force - Euro 7. Officials in Brussels have not yet specified what it will be, but proposals are for up to 10 times reduction of the ceiling for carbon monoxide and between 3 and 8 times - for nitrogen compounds. Many people in the automotive industry have described this as a practical ban on internal combustion engines, and even on hybrid cars. After Euro 7, only pure electric cars will survive.

**ELECTRIC VEHICLES.** In theory, they sound like a good solution for Europe: zero emissions in cities, more efficient use of wind and solar energy, and reduction of the EU's dependence on fuel imports, which are now worth € 1 billion ... a day. There are still problems with infrastructure, electricity generation and the adaptation of transmission networks, but they are solvable.

What has not yet been solved is the price of the electric car itself. "If I try to summarize the situation with electric cars today, it is very simple: the price of the car depends on the price of the battery," said Philippe Brunet, vice president of the Renault Group, in an interview with Automedia.bg. "Roughly speaking, the battery is 50% of the price. Only the battery. While in conventional cars the engine is between 20 and 25% of the cost. And in the electric car we must also add the electric motor and power electronics. Until the price of the battery decreases dramatically, we will not be able to offer an electric car at a really low price ... A budget electric car is possible, but in today's conditions this means a small electric motor and a small battery". A good example is the current Citroen Ami - with two seats, 8 horsepower, 45 kph top speed and up to 70 km range on a single battery charge. But not everyone would describe this thing as a "car".

**RAW MATERIALS.** The constant mantra in the

industry is that with mass production, electric cars will become cheaper because they will achieve economies of scale, and their price will become equal to that of internal combustion cars. However, this is not happening. The cost of batteries has actually fallen more than ten times from early models 15 years ago. But it's still well over \$ 100 per kilowatt-hour. And economies of scale are countered by rising commodity prices due to increased demand. Mining.com is creating its EV Metal Index, which tracks the quotes of the main metals used in electric cars. For the period from the summer of 2020 to the summer of 2021, this index rose by 167 per cent. Lithium hydroxide exceeds \$ 21,500 per tonne. Cobalt is over \$ 60,000 per tonne.

**SUPPLIERS.** The other big problem with electric cars is that they barely make a profit. Most manufacturers sell them at cost, relying on their traditional petrol and diesel models for a better margin. Tesla's long-awaited first annual profit was achieved more by selling emission quotas (to competitors such as Fiat-Chrysler) than by margining on the company's electric vehicles.

The reason is, as Philippe Brunet explains, that the battery is 50% of the price of the electric car, and 80% of the price of the battery comes from the cells. Which no major carmaker produces by himself. The ten largest battery manufacturers in the world are all Asian companies. In the Top 3 are the Chinese CATL, the Korean LG Chem and the Japanese Panasonic, which together hold almost 70% of the market.

Here's the problem: if petrol and diesel cars drop out of the bills, manufacturers will have to profit from electric cars (which means selling them at prices higher than their production cost). And at the same, carmakers need to start making their own batteries. Almost everyone has taken steps in this direction - from Volkswagen and Renault to Tesla. But the creation of such productions is also a serious investment, which must then pay off.

**MICROCHIPS.** At first glance, this is a simple crisis in the supply system, caused by the interruption last year and the sudden increase in demand for all kinds of mobile devices, as well as cryptocurrency mining devices.

But in fact, the current shortage of integrated circuits is likely to transform the very model by which car companies buy them. In the past, chipmakers have been reduced to the level of second-tier suppliers, serving at car giants' pleasure. But now they are cleverly using the crisis to win better positions. Intel boss Pat

"A budget electric car is possible, but in today's conditions this means a small electric motor and a small battery"

Philippe Brunet

Gelsinger, in plain text, advised car companies to stop buying the "cheapest" chips at 50 cents apiece, and to switch to more modern products. But the difference in price, of course, will be at the expense of the end-user.

**GREED.** Car companies like to cite external factors when they have to justify higher prices. But the truth is that there are internal ones as well - mostly the growing pressure from shareholders. In the past, most carmakers were family businesses. Today, they are captivated by financial investors who want more returns. For example, Volkswagen has been operating for a profit margin of 2-3% for years. But the comparison with Toyota and its 15% put several consecutive executives of the German concern under too much pressure. Today, everyone wants to sell in the higher segments, with a larger margin. Peugeot has already achieved this, now the same is at the heart of Renault's transformation plan. This also explains the ever-faster thinning of the small car segment - with the increasing technical requirements, they are simply no longer profit-



able. Recently, Skoda boss Thomas Schaefer estimated that under the new eco-standards, a car must cost at least 23,000 euros to make a profit.

**THE COMPETITION.** From the 1990s until today, the production capacity of the automotive industry has virtually doubled. Most companies have factories in surplus. The ever-growing sales model worked largely because of the rapid development of new markets, led by China. But now China has its own car industry, which is starting to compete with Europeans, Japanese and Americans. Reducing sales volumes inevitably pushes prices up.

**MANDATORY ELECTRONICS.** Another specificity of the European market, which makes cars more expensive here than in America. The European Union is not only tightening emission standards but is constantly expanding the list of mandatory car equipment. It started decades ago with seat belts, anti-lock brakes and electronic stability systems. Today, tire pressure sensors and automatic accident

alarms are mandatory. From the middle of 2022 the obligatory equipment will include also a breathalyzer for alcohol in the car, which will block the ignition in case of a positive result; a camera to monitor whether the driver is paying attention to the road; a system for automatic observance of the maximum speed, which will not allow you to exceed it; a traffic video recording system; an even more precise tire sensor, and a few more such additions. Who will pay for all of them? You know the answer.

**TAXES.** The success of electric cars in recent years is largely due to the generous subsidies for their purchase, granted by most governments. But these subsidies are temporary. The other compensation for the high cost of electric cars is the lower cost of charging them compared to petrol cars. But even this will not last long. The problem is that currently, the excise tax on fuels is a major source of revenue for governments. Tony Blair's Institute for Global Change recently estimated that with the increase in electric vehicles, United King-

dom treasury revenues will fall by 10 billion pounds by 2030, and by as much as 30 billion in 2040, when most cars on the road are expected to be electric. The way to compensate for this is to introduce a tax on the kilometres travelled by the electric car. Thanks to the car's connectivity, the authorities will always know exactly how much and where you drove.

**USED CARS.** Even for wealthy Western Europeans, the current prices of new cars are too high. One proof is that for a few months in 2021, the best-selling model on the continent was the Dacia Sandero. The other is that the demand for used cars is growing everywhere - and with them the price. In Spain, this market grew by 39% in the first half of 2021. In Germany, the average second-hand selling price has risen by as much as 3,000 euros per year. Does this mean that Europeans will be driving older cars in the future? Which would completely erase the ecological efforts of Brussels officials? Actually not. Officials have thought about that as well. First, old cars are likely to be banned in most major cities. And secondly, one of the pillars of the infamous Green Deal provides for the emission quotas now imposed on energy and heavy industry (and already leading to a significant rise in electricity prices) to be transferred to motor fuels as well. If this proposal is accepted, the price of gasoline in Bulgaria could jump to over BGN 3.20 per litre in 2023, predicts Svetoslav Benchev, an expert from the Bulgarian Oil Association. In Germany, a similar scheme is already underway, raising the annual energy expenses of the average household by about 400 euros.

**WHAT IS THE CONCLUSION?** Not particularly happy for those who love their vehicles: in the future in Europe it will be difficult and drastically more expensive to own a car. Car ownership will be replaced by schemes for renting, sharing, subscription use. Just as Ostap Bender, the immortal hero of Ilf and Petrov, said: the car is not a luxury, but a means of transportation. Like everything in life, it has its pros and cons. But in conclusion, I want to let you think about a quote from an essay by the great English writer James G. Ballard, written in 1971. In it, he says: "The car as we know it is on the way out... I deplore its passing, for as a basically old-fashioned machine, it enshrines a basically old-fashioned idea: freedom. In terms of pollution, noise and human life, the price of that freedom may be high, but perhaps the car, by the very muddle and confusion it causes, maybe holding back the remorseless spread of the regimented, electronic society." ■

The article originally appeared in Bloomberg BusinessWeek EG Magazine



# THE INVISIBLE THREAT

**Microchips are the most complicated thing ever created by man and addressing the current shortage won't be fast or easy**

By **KALIN NIKOLOV** / Photography **SHUTTERSTOCK**

Most people are probably puzzled about the increasingly concerning news of microchip shortages coming from various industries, ranging from automobile to electric toothbrush makers. This shortage hampers production, shuts down plant, increases prices to the point that there are months-long waiting lists for some products and purchase limits, just like during dawn of socialism in Eastern Europe.

The perplexity stems from the fact that the semiconductor crisis was knocking on the door last summer and has only further exacerbated since then, with many analysts believing it won't end anytime before 2023. This is truly strange for the average person - why are they not making more of them? Why don't they start a third shift and build new plants? What's even more is that there is no shortage of political support - the EU and China already announced programs to support such production, while the newly elected US President, Joe Biden, wants to allocate the colossal sum of USD 37 billion for this purpose. One might ask what's in the way of solving this problem as soon as possible.

## THE MOST COMPLICATED THING IN THE WORLD.

The reason for asking these questions is that the majority has gotten used to taking for granted the technology behind the information revolution and are not really versed in its essence. Just like they're not aware of the fact that the microchips in question are probably the hardest and most complex thing to build that man has created. One of the leading managers in the sector joked that "It's not rocket science - it's much more difficult". It's also very expensive. The above-mentioned USD 37 billion that Biden wants to spend, with Congress's approval, could easily suffice to build 20-30 automotive plants, but will hardly be enough for a couple of small microchip factories. Building the latter would also require much more time.

**CHIPS OR SEMICONDUCTORS?** Even the terminology sounds confusing for the unenlightened. Is this about microchips or

about semiconductors? Actually, if we want to be technically correct - it's about neither. The right term to describe what we call "a chip" is an integrated circuit. It consists of a set of complex electronic circuits on a small flat piece of semiconductor material. The first integrated circuit, created by Jack Kilby in 1959, was made from germanium. Robert Noyce invented the first silicon-based integrated circuit in 1961, which gave rise to all of modern electronics.

Kilby and Noyce took advantage of a series of discoveries proving that transistors can easily replace the vacuum tubes previously used on the earliest computers and other electronic devices.

**THE REVOLUTION OF TRANSISTORS.** The problems with the lamps are obvious for anyone who has seen the original Atanasoff-Berry computer, the first programmable digital computer - **ENIAC**, or any of the other early specimens in this field.



**ENIAC**, which was heralded as “The Giant Brain” by the press in 1946, took just 30 seconds to calculate ballistic trajectories that would take a human 20 hours. It was literally gigantic - it contained 70,000 resistors, 18,000 vacuum tubes, 10,000 capacitors, 7,200 crystal diodes, 1,500 relays... the whole thing occupied an area of 167 square meters and weighted 27 tons. It consumed 150 kW of electricity and rumor says that when it was turned on, the lights flickered across Philadelphia.

**ENIAC** is capable of performing 5,000 operations per second. The smartphone in your pocket, built with integrated circuits, performs over 25 BILLION, while a modern processor, like the AMD Ryzen Threadripper is capable of 2.35 trillion.

20,000 ON A SINGLE HAIR. Semiconductors could in practice be conductors and isolators, changing their function based on external energy sources, such as low-voltage electricity. This allowed electronic components to

undergo a drastic miniaturization over the past decades. As Bloomberg recalls, the first Intel processor (4004 from 1971) contained 2,300 transistors sized 10 microns, or 10 millionths of a meter. Today’s products of companies, like the Taiwanese giant TSMC, use transistors as small as 5 nano meters - 5 billionths of a meter. This is 20,000 times thinner than a human hair.

A modern Nvidia chip that is 2.6 cm by 2.3 cm big contains 8.3 BILLION transistors.

**THE PRICE OF MOORE’S LAW.** This is the famous Moore’s law, formulated half a century ago by Intel co-founder Gordon Moore. The law states that the number of transistors in an integrated circuit doubles every two years.

This whole miniaturization, however, comes at a price. Making microprocessors is becoming increasingly complicated and expensive - according to CNBC assessments, equipping a modern plant exceeds USD 15 billion. In addition to that, such an investment is high-risk, ▶

### FACTS

Microchips are the fourth largest US export after aircraft, automobiles and oil

China, the biggest manufacturer of electronic devices in the world, is forced to import a huge part of the semiconductors it uses. In 2017, they were the biggest import in the country worth USD 260 billion





► because a competitor taking a step towards miniaturization would make your products obsolete.

## THE RAW MATERIAL IS JUST SAND.

As everyone probably knows already, the main raw material used in today's electric components is silicon, which is extracted from good-old sand. It is a cheap, accessible and almost unlimited material.

Silicon extraction requires heating the sand in furnaces at temperatures of up to 1,400 C, which is not very expensive. What happens afterwards, however, increases the value drastically.

## THE CLEANEST ROOM IN THE WORLD.

Since the separate transistors are now much smaller than viruses, they must be protected from contamination. A single speck of dust can ruin work worth millions of dollars. That is why semiconductor fabrication plants have special isolated rooms, compared to which your average hospital operating room would look like a garbage dump. An average operating room has around 10,000 small particles per cubic meter of air. This concentration the microchip factory's isolated rooms stands at just 10 particles per cubic meter thanks to the most complex air filtration system created by man. Employees are forbidden to even smoke before coming to work.

## 2,000 DIFFERENT OPERATIONS.

An average microchip consists of dozens and even hundreds of layers. Putting in the circuits in each one of them, which will become transistors, requires a process misleadingly called lithography. Actually, lasers are used for that purpose - not just any, but ultraviolet ones, because visible light is not precise enough. The processes are painstakingly slow and there's no way to accelerate them. Making a single microchip takes 1,000 to 2,000 different operations and takes around three months on average.

## TESLA PAYS IN ADVANCE.

The crisis has actually started to change the relations between the subcontractors and clients. It was unthinkable for decades in the automobile sector for manufacturers to pay suppliers in advance, but Tesla has recently just started doing that in order to secure enough microchips. The US company even considered acquiring its own semiconductors plant, but the colossal costs dissuaded Elon Musk from taking such a step.

## MILLIONS OF LITERS OF WATER.

Building new plants is compli-

# WHAT LED TO THE CURRENT CRISIS?

Numerous factors came into play for the global shortage to happen:

- COVID-19 and the measures taken by most governments against it put people at home, which led to a drastic increase in demand for electronic devices, such as smartphones, tablets, laptops and TVs.
- The automobile industry is undergoing an accelerated transition to electrification and autonomous driving, which means that each year cars will need more microprocessors. Meanwhile, demand for new cars recovered faster than the industry and

what its suppliers were planning.

- A fire in the Japanese Renesas Electronics Corp, which supplies 30% of microchips in the automotive sector, further exacerbated things.
- The so-called internet of things is developing fast, meaning that all kinds of devices, ranging from refrigerators and hair straighteners to traffic lights, now need chips.
- The speculations surrounding cryptocurrencies led to a boom in mining, which requires an increasing amount of computing power - faster and more powerful processors. ■



ated given the required resources. As we said earlier, silicon is abundant, but making chips requires a lot of electricity and exceptional seismic stability. That is why the big manufacturers have been focusing on the US state of Arizona with its solar parks in recent years.

The problem is that the manufacturing process requires huge quantities of water - dozens of millions of liters per day. That caused serious tension with the local communities in Arizona, where water is definitely in shortage. The manufacturers assure the locals with water supply projects and the promise to fanatically recycle the used water.

## A TRIMVIRATE AT THE TOP.

The sector is famously difficult to

get into for beginners due to the presence of three almost all-powerful giants. The share of Intel, Taiwan's TSMC and Korea's Samsung Electronics is exactly half of all annual revenue in the sector. Smaller players must work with the remainder and find ways to return their multimillion-dollar initial investments.

Meanwhile, the company leaders are happy about the astonishingly high margins - over 50% for TSMC, according to The Financial Times. This practically guarantees them unlimited budgets for research and development, which leads to technological superiority over competitors. A vicious cycle, from which there's no easy way out - whatever the politicians say and whatever budgets they approve. ■



DAILY  
**SPORTS  
NEWS**  
AND  
THE LATEST  
ON BULGARIAN  
AND WORLD FOOTBAL





# THE GREAT GERMAN REVOLUTION

**523 hp, from Sofia to Varna on a single charge, bells and whistles from the Rolls–Royce Phantom – the new flagman from Munich was truly impressive**

By **KONSTANTIN TOMOV** / Photography **UWE FISCHER**

Whatever people may say, the Tesla remains the benchmark for electric vehicles. However, Tesla is the creation of people who are very good at making computers. Now we'll meet the new BMW iX - the creation of people who are very good at making cars. Will this be enough to tip the scales? We have all day on the roads of Bavaria to find out.

**SPEAKING OF TESLA, LET'S NOT FORGET** that BMW was actually one of the electric vehicle pioneers. The i3 prototype appeared two years before the Americans released their first mass-produced model. Most competitors at the time still believed that diesel engines were the technology of the future.

Subsequently, the Bavarians slowed down the pace and the i3 was alone on the market for close to eight years. Now we're seeing,

however, that all this time was not wasted in Munich. The iX and the new i4 are not just another step in the process of electrification. They are a whole new stage.

The technological innovations in these cars are numerous, but since the leading factor for buyers in recent years has been design and not technology, let's start there.

**AS FAR AS THE DESIGN GOES**, the iX has brought BMW criticisms even before it saw the light of day. The iNext concept, which preceded it, was definitely not liked by the masses. Fortunately, the final version of the car no longer had the annoying features.

**BMW's** chief designer described this automobile as a well-polished stone. This smoothness was dictated by the need for maximum ▶

## **BMW iX xDrive 50**

maximum power: 523 hp  
maximum torque: 765 Nm  
acceleration from 0-100 km/h: 4.6 seconds  
maximum range: 630 km



► aerodynamics. Size-wise, the iX stands somewhere between the X5 and the X7. The X5's drag coefficient is 0.31, while the iX's is 0.25. The legendary Ferrari F40's drag coefficient is almost a tenth higher - 0.34. Despite of this, we would not describe this exterior as unambiguously attractive. However, it's definitely original, which is even better. At a time when most new car models are difficult to tell apart, this BMW can be recognized from a mile away.

**THE MOST HEATED DEBATES WILL** be caused by the thing in the front. I would rather not use the word grille, because no air will ever pass through it. It's merely a cover made of plastic. But not any plastic, because this unique material can fix itself when scratched or damaged. It's enough to just slightly heat with a hair dryer or just let it sit in the sun. This interest in new materials goes beyond the grille and into more important parts of the car. If we exclude the battery, the iX's body is much lighter than the X5's. That's due to the carbon fiber cage and aluminum spaceframe, initially created for the Rolls-Royce Phantom. The air suspension and unique panoramic roof, which can be electrically dimmed with the press of a button, also come from the Phantom.

**THE iX COMES IN THREE VARIANTS**, based on its battery and power, with all three coming with an all-wheel-drive system. The base xDrive 40 has a 71 kWh battery, 326 hp and a maximum range of 425 km. However, we tested the better one, which comes with a 105 kWh battery and 523 hp. This monster is capable of going from 0 to 100 km/h in 4.6 seconds, given that battery alone weighs 640 kg. Next year there will be a 620 hp variant. The handling is even more impressive than the acceleration. The iX's steering and agility are mindboggling for a car this size. The secret is in the rear-wheel-steering system and the new generation battery, which is flatter and installed on the floor, lowering the center of gravity by 9 cm, compared to the X5.

The interior completely corresponds to the innovative propulsion. For some twenty years now, each new BMW seems pleasantly familiar on the inside, because the company's approach to the interior has always been an evolutionary one. That's a great thing, because as soon as you sit down in a newer BMW, you would instinctively know where things are and how they work. That's not the case here, however. The iX is not just unlike any BMW made so far, but it's unlike any other car. The fact that you would need training just to get out of the vehicle is proof of this. There is no inside door handle, but a discreet button for releasing the lock.

The instrument panel's design is minimalist and obviously despises smooth curves, as well as traditional materials.



**THE MOST IMPRESSIVE THING ABOUT** this interior is that almost everything it's made of was trash until recently. The floor mats are made of old plastic, fished out of the ocean. The wood and the aluminum elements have been recycled. The leather on the seats has not been treated with chemicals, but with olive leaves, in order to spare the environment. The new double screen for the instrument cluster and the infotainment is perched on the dashboard, which is not very original. It's graphics and resolution, on the other hand, are excellent, it can easily be read even in bright sun and is big enough for you to open a few windows at the same time. The navigation system has an augmented reality, which is a huge pro.

There's not much sense behind what I just wrote. It's highly unlikely anyone really doubted that BMW is capable of making a dynamic car with precise handling and a luxurious interior. We've been taking all of this for granted for a while now. The big question is what did BMW do in the fields they're not known to be best in - the software, the battery and the energy flow management. Here comes the perfect place to test this - on the legendary German autobahn, where, as you know, the speed limit is "as fast as you can go". This car's acceleration is in no way like that of the Testa Model S or the Porsche Taycan. It's not gut-wrenching, but it's very, very impressive. The question for us is not how fast we

can go, because the iX is artificially limited to a top speed of 200 km/h. The question is what will happen to the range when driving at said top speed.

**THE MAXIMUM 620 KM RANGE, ACCORDING** to WLTP is hard to achieve in real life, and BMW's engineers have admitted this. They assure us, however, that the car can cover 500 km at a speed of 130 km/h, and up to 450 km at 170 km/h.

We found this car to believe, but with a battery at 93% at the start and after driving 240 km from Munich to the Alps, we still had 44% left and a range of 226 km. As I mentioned, we were driving faster than 170 km/h. The range should also remain about the same in the winter, because the iX has a very complex system for utilizing the residual heat. Heating the interior practically does not consume energy from the battery.

Of course, all these wonders come at a price. The xDrive 40, which is the base version, starts at 160,000 leva in Bulgaria. The xDrive 50 will cost almost 199,000 leva. This price, however, is similar to what you would pay for a gasoline X5 with similar power. It's 20,000 cheaper than the gasoline X7. The conclusion is that, despite the weight, the motor and numerous bells and whistles, which make this car a smartphone on wheels, it remains a true and genuine BMW. In other words - something that gives you pleasure. ■

**BARNES**  
INTERNATIONAL REALTY



**PARADISE  
PLACE**



**SOFIA'S PREMIUM RESIDENCE**

**☎ 0884 654 690 | WWW.BARNESPARADISE.COM**

# THE BEST DISCOVERIES OF 2021

From the first piloted flight on another planet to the shower that uses four times less water: 15 proofs that progress is far from halted

By KALIN NIKOLOV / Photography SHUTTERSTOCK, FILE

**F**ollowing an old tradition, towards the end of the year we present you the most significant discoveries and the most curious inventions of the past 12 months. Some of them could have a revolutionary effect on our lives. Others may change small details to make it better. Still others, as always, will turn out to be just empty promises. But in any case, the length of the list from which we've culled our Top 15 inspires confidence: progress has not only not stopped, but seems to be steadily accelerating.

## THE FLIGHT OF INGENUITY

There was nothing particularly revolutionary about the Perseverance rover that successfully landed on Mars on 18 February. It was just a slightly improved version of its predecessor, Curiosity. But on board it carried another vehicle, weighing just 1.8 kilograms, which on 19 April, 2021, made the first-ever controlled flight into the atmosphere of another planet. Since ▶





► then, the tiny helicopter has made numerous more flights, increasingly daring in their reach, and captured previously unseen regions of the Red Planet with its cameras. NASA is already working on its successor, which will be able to carry scientific equipment other than the cameras.

## THE UNDETECTED VACCINE

“Vaccine” is probably the most overused word in 2021. But in our rankings, we’ll give credit not to the record-setting Covid-19 vaccine, but to a vaccine originally developed in 1986 that went through 35 years of refinement and research before the World Health Organization recommended it for mass administration to children in October 2021. It is RTS,S/AS01, branded Mosquirix, created by GlaxoSmithKline to tackle malaria. It is the first vaccine in history to target a parasite-caused disease.

Malaria, which is caused by the so-called malarial plasmodium and transmitted by mosquitoes, sickens between 200 and 250 million people each year, and causes nearly half a million deaths. Mosquirix does not have the high effectiveness of vaccines against polio or tetanus, for example. But in combination with antimalarial drugs, it is able to reduce both morbidity and mortality by about 70%, as trials in several African countries have shown.

## 3D-PRINTED... MEAT

We’ve already got used to 3D printers, which

are now widely used for everything from making dental crowns to building houses. But this year, scientists at Osaka University in Japan pushed the boundaries of the technology into a rather unexpected area - the creation of meat. They produced on a bioprinter in the laboratory a veal with the texture of the famous Japanese Wagyu breed.

Raising meat in a laboratory holds an enormous potential - not only from an ethical point of view, but also because it will require far fewer natural resources than raising meat animals.

## HAIR DRYER THAT DOES NOT DRY

Hairdryers have come a long way since 1890, when Parisian hairdresser Alexandre Gaudreoy invented the first one. But at their core, today’s dryers use the same principle: a blast of hot air dries your hair of moisture. This helps give it shape and protects you from colds, but unfortunately it’s not very good for the hair itself, which doesn’t like drying and high temperatures.

But now a dryer



here’s hair that

dries... by moisturizing. Developed by Panasonic and called Nanoe, it further hydrates the hair by extracting moisture from the air, and so the hair doesn’t suffer.

## MANAGE WITH THOUGHT

The idea of communicating with machines not by touch and not even by speech, but only by thought, is not new at all, and it’s been toyed with by people across too wide a spectrum from Isaac Asimov to Elon Musk. But there is one very solid obstacle to it: the human skull. To properly and accurately pick up brain signals, sensors would have to be implanted under the skull, but not many people are willing to undergo such a risky intervention.

Now, however, US company Synchron is offering another solution. Its Stentrode is similar to the already well-known stents used in cardiac surgery - only it’s designed for the brain. It reaches that far along the blood vessels without requiring brain surgery. It then picks up signals from the brain for certain types of activities and transmits them to electronic devices. The technology has already been tested on two completely paralysed patients suffering from Lou Gehrig’s disease. Both are now able to operate a cursor on a computer screen and press buttons. It doesn’t sound like much, but it’s actually enough for them to use the Internet, send messages, and shop.

## TUBES OF... ELECTRICITY

The transition to green energy is a challenge



even for rich countries with a developed infrastructure. Let alone places like Africa, where access to any electricity is sometimes problematic. But a Nigerian student at the University of Toronto has asked himself that question and found a workable answer. Olugbenga Oluhanjo is the founder of the Reeddi start-up, which offers electricity in a way quite reminiscent of buying a tube of gasoline. The company installs its own charging stations connected to solar panels that charge 20 Reeddi capsules - actually batteries with a capacity of 250 watt-hours. You can rent one or more capsules for 24 hours, then return them to the station for a new charge. One capsule is enough to power a laptop for several hours. For places where access to electricity is limited, this is a perfectly practical solution.

## A MAGIC WAND AGAINST VIRUSES

In truth, this isn't exactly a 2021 invention: the first such disinfecting 'magic wands' from the Verilux company were created a decade ago, and put through some pretty lengthy trials. They proved that the wand's ultraviolet radiation killed 99.99% of so-called methicillin-resistant staphylococci (MRSA) in just one second and from a distance of 22 mm. It also works against viruses such as H1N1 or SARS CoV2, with an effectiveness of 98.7%. In fact, the technology is similar to that used to disinfect Bulgaria Air aircraft before each flight.

## SANATECH SEED

## TOMATOES

This summer, the first agricultural product with genes altered by CRISPR technology hit the market in Japan. The company Sanatech Seed has applied the method to the Sicilian Rouge tomato variety to increase the content of the neurotransmitter GABA, which some new research suggests has a calming effect on the body and improves sleep. The seeds with the added genes were offered for free sale and some 4,800 Japanese farmers took advantage, and in the summer the first tomatoes with increased GABA content appeared on the market. According to Japanese health standards, these tomatoes are not considered "genetically modified" because similar mutations can occur naturally. However, the CRISPR method gives scientists much more control over exactly which genes to affect.

## THE OMNIVERSE

For millions of parents around the world, already terrified of the time their children spend online, the ideas of creating new three-dimensional digital universes probably sound nightmarish. But this direction of development, foreshadowed by The Matrix and Ready Player One, now seems inevitable. The big question is just who will create the working technology to make it happen. Mark Zuckerberg has stated similar ambitions with his Metaverse. And video card maker NVIDIA is developing its Omniverse, promising "ultra-realistic virtual spaces". It's not just about video games and entertainment

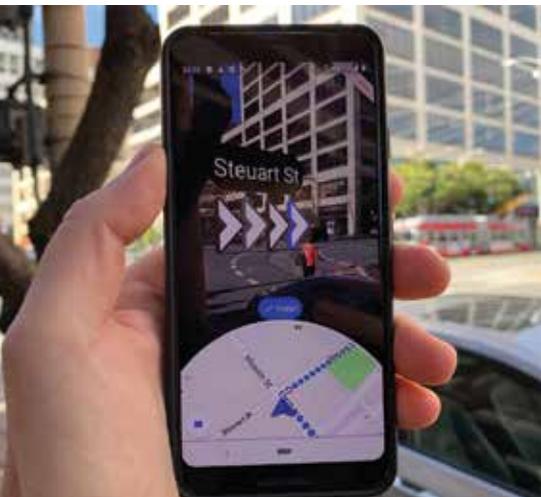
- such a system could be used for everything from autonomous driving (NVIDIA has a partnership with BMW) to infrastructure planning.

## ECONOMICAL SHOWER

Water is going to be one of the greatest riches in the next one hundred years - and for many communities on the planet it is even now, causing conflict, war and suffering. Attempts to conserve it are not very effective so far. But the solution may come from a rather unexpected source - cosmetics giant L'Oréal. In conjunction with Swiss technology company Gjosa, L'Oréal has developed an entirely new shower called the Water Saver. In it, a stream of water is broken down into droplets 10 times smaller than usual, and then accelerated to provide a rinsing effect. Where a normal shower uses on average around 8 litres of water per minute, the Water Saver makes do with just 2 litres. The company has already started supplying the unit to hairdressers, and will soon market it for domestic use.

## SMART FARMING

Modern farming, mechanised and increasingly automated, is incomparably more efficient than that of the dawn of the Industrial Revolution. But it remains just as wasteful in terms of resources. SupPlant, an Israeli tech start-up, aims to change that. The company has developed a comprehensive hardware-software solution that monitors the stress level of plants, how much moisture they need and whether growth is pro-▶



► ceeding normally. This information is combined with weather forecasts to give farmers precise recommendations on when and how much to water their crops. Following the success of the first test plots, SupPlant has received numerous new orders and is now used by over half a million farmers in Kenya.

## HOW TO HEAR FROM AFAR

Developed initially for people with hearing aids or implants, Phonak Roger On can actually be used by a far wider range of people. The brainchild of Swiss giant Sonova, this high-tech microphone can not only amplify distant noises but also filter speech from loud background noise. Its sleek design earned it the Red Dot Award, and the technology itself earned it the German Innovation Award.

## WHERE AM I, GOOGLE?

Modern satnavs are a wonderful thing, but they still have some weaknesses - for example, if you're walking around a big city and need help, the navigation directions are meaningless until you know exactly where you are. Google solves this problem with its new Live View AR feature. It works in areas for which Street View is already available. You just need to let it trigger your smartphone's camera to recognise a sign, building, or other landmark and show you exactly where you are and which direction to take. Augmented reality can also carry all sorts of other information, from tourist information to shopping and services.

If you're walking around a big city, the navigation directions are meaningless until you know exactly where you are. **Google solves this problem with its new Live View AR feature**

## A GLIMPSE OF THE UNSEEN

The Event Horizon Telescope is one of the best proofs of what humanity is capable of when it joins forces. Developed by 13 different institutes from around the world, this instrument is effectively a network of radio telescopes across the planet, allowing scientists to peer where we never thought possible. In 2019, it imaged a black hole - the supermassive core of the elliptical galaxy M87 - for the first time. And in 2021, it managed to produce the first image of a black hole with polarised light - something that has given us new insights into the monstrous forces at work there.

## LIGHT FOR READING

It's not necessary that inventions be of planetary significance to deserve attention. This little gadget won't change the world - but it could save your marriage. Every night around the world, countless arguments break out between partners, one of whom wants to sleep and the other wants to do some more reading. The Wearable Reading Light solves the problem: worn comfortably around the neck, it offers a directional light with adjustable colour temperature (from a warm 2700 kelvin to a rather cold and bright 7000 kelvin). Light scatter around the room is minimal, plus it conveniently follows your movements when you decide to change posture. ■



**POSOKA.COM**

# Carnaval La Vega

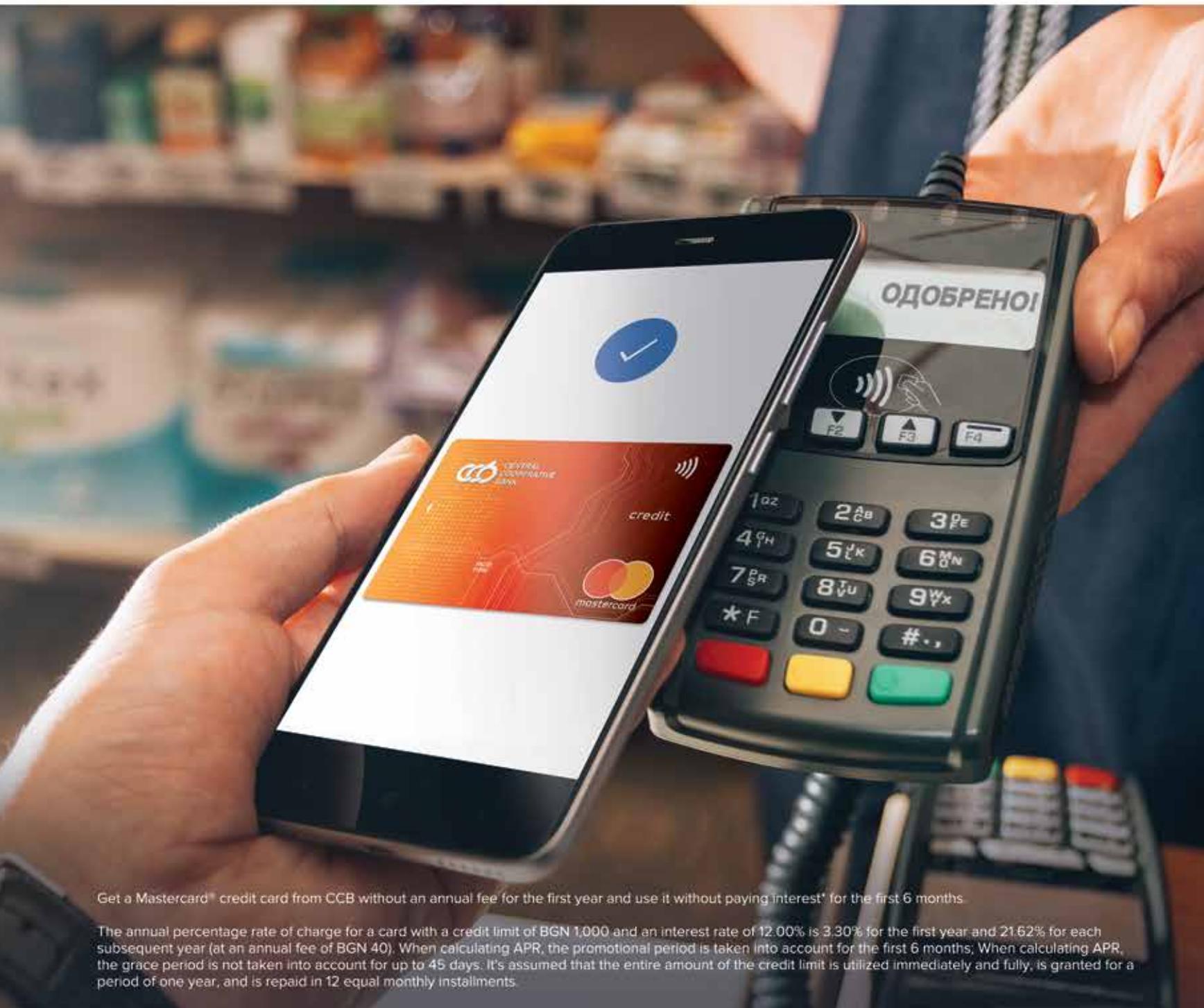
## The Pulse of Dominica

In the month of February, Dominicans head out into the open streets in lavish masks and sequined clothing to take part in Carnaval La Vega. To the sounds of merengue, bachata, and Caribbean rhythms, they celebrate their country's independence and honor their ancestors.

Book your own exciting trip at  
[www.posoka.com](http://www.posoka.com) or contact us on **0700 17 107**

# Get a Mastercard® credit card from CCB

without an annual fee for the first year and use it without paying interest\* for the first 6 months.



Get a Mastercard® credit card from CCB without an annual fee for the first year and use it without paying interest\* for the first 6 months

The annual percentage rate of charge for a card with a credit limit of BGN 1,000 and an interest rate of 12.00% is 3.30% for the first year and 21.62% for each subsequent year (at an annual fee of BGN 40). When calculating APR, the promotional period is taken into account for the first 6 months; When calculating APR, the grace period is not taken into account for up to 45 days. It's assumed that the entire amount of the credit limit is utilized immediately and fully, is granted for a period of one year, and is repaid in 12 equal monthly installments.