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a makeover

NUCLEAR

Pocket
reactors
on the rise

STOCKS

Chinese markets
ready to rebound



UKRAINE WAR

WILL IT PUSH THE WORLD OVER THE EDGE?

SPECIAL FEATURE:
HOW SWISS COMPANIES ARE
WEATHERING THE CONFLICT

ISSN 2296-3278

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> AUTONEUM > HOLCIM > STADLER RAIL > VETROPACK > NESTLÉ > CLARIANT > SWATCH



SANTOS
DE
Cartier

We are lucky



By Marc Bürki,
CEO of Swissquote

The terrifying images from Bucha, Kharkov, Mariupol and many other cities and regions in Ukraine remind us every day how lucky we are to live in Switzerland. We live in peace in a prosperous country where democracy reigns. The war in Ukraine, which is happening only 1,500 km from our borders, is a tragic reminder of this. The numbers are appalling: tens of thousands of deaths, both civilian and military, as well as more than five million people forced to flee their country. And the dire consequences of the war are not limited to the countries involved in the conflict.

Before the start of the conflict, Ukraine and Russia played a major role in the global agricultural industry. As a result, the conflict has increased food prices. According to the UN Food and Agriculture Organization (FAO), international prices for a basket of food items increased by 12.6% in March compared to February and 33.6% compared to March 2021. It's unprecedented. For the poorest countries, famine is a threat. We're lucky to live in a rich country.

p. 54 **Russia** is also a large producer of raw materials – mostly oil and gas, but also strategic metals such as titanium, palladium and aluminium. The war has caused staggering

price increases here as well. In Europe, skyrocketing energy bills and raw material prices are leading to unchecked inflation. In March, inflation in the eurozone reached 7.5%, its highest level since the creation of the euro, sparking fears of a **recession** in Europe. Switzerland has been spared thus far: thanks in particular to protection from a strong franc, inflation has remained contained to 2.4% in March.

p. 50

But most **Swiss companies** are nevertheless affected by the war's repercussions, either directly or indirectly, as we see in this edition. Some companies have even suffered material losses, such as glass packaging manufacturer Vetropack, whose Ukrainian factory was heavily damaged. The company's CEO, Johann Reiter, granted us an **interview**.

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p. 42

In this context, Switzerland is honoured to be able to help as much as possible, whether via diplomatic efforts, welcoming Ukrainian refugees or private financial donations. Swissquote has made a contribution to the Red Cross. While small in the face of the immense suffering caused by the war, it's the least we can do. Because we are indeed very lucky.

Good reading!



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Chopard

THE ARTISAN OF EMOTIONS – SINCE 1860

CALIDA



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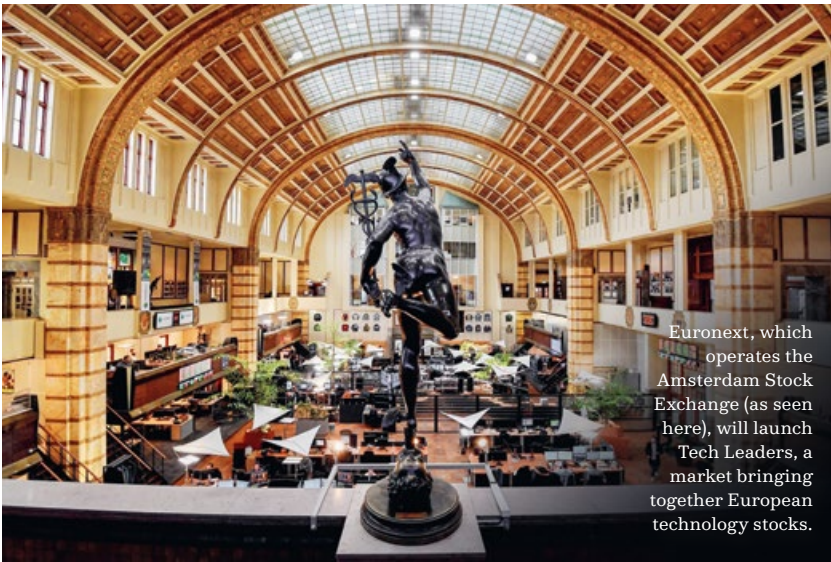
SCANS



“The days of 9 to 5, Monday to Friday are over”

Stewart Butterfield, CEO of the messaging service Slack, told CNN on 9 March.

stock exchange
LAUNCH OF THE EUROPEAN NASDAQ



Euronext, which operates the Amsterdam Stock Exchange (as seen here), will launch Tech Leaders, a market bringing together European technology stocks.

JOHN THYS / AFP

In a long-awaited initiative, the stock exchange operator Euronext – which groups together the financial markets of Paris, Amsterdam, Brussels, Dublin, Lisbon, Milan and Oslo – is set to launch a new exchange in the second quarter of 2022. The new Tech Leaders segment will include high-growth tech companies with the aim of holding on to European unicorns before they are lured away by the Nasdaq. To do that, Euronext will

also provide a full range of pre-IPO and post-IPO services. The composition of the segment will be announced in the coming months after approval by the regulator. The selection was made in early February from among the 763 tech companies listed on the pan-European market infrastructure, but the index is expected to grow quickly. Last year, an all-time high of 50% of Euronext’s IPOs were in this sector, for a total of 212. — ENX

war
IPOS COME TO AN ABRUPT HALT



GETTY IMAGES

In Q1 2022, only 321 companies have gone public worldwide, which is 37% less than in 2021 over the same period, according to a report by the firm EY published on 31 March. These IPOs raised \$54.4 billion, compared to \$82 billion last year. “The year got off to a flying start, following the prosperous Q4 2021,” said the EY report. “January 2021 was even the best start in the last 21 years in terms of revenue.” And then war broke out, and many companies decided to push back their IPOs due to uncertainty in the markets.



40

Number of Starlink satellites lost in a geomagnetic storm in February.



-\$240 BN

Meta’s one-day drop in value on 3 February, the worst in US stock market history.



“It is necessary, a fourth booster right now”

Pfizer CEO [Albert Bourla](#) said about the COVID-19 vaccine in an interview on CBS on 13 March.

augmented reality
SNAP STRENGTHENS ITS POSITION IN SMART GLASSES



NEXTMIND

Snap has acquired NextMind, which markets a connected headband, the beginnings of future glasses.

As Meta’s (formerly Facebook) smart Ray-Bans hit the European market, Snap confirms its plans to gain a bigger share of the market by acquiring the French startup NextMind for an undisclosed amount. Grounded in neuroscience, NextMind designed a headband with a built-in electroencephalogram, which has been on the market since the end of 2020. With the capability of reading neural activity, the technology enables wearers to control a computer

interface without their hands. Elements from this technology will probably be integrated into Snap’s future iterations of smart glasses, to make it easier for wearers to select or confirm options without using their hands or voice. In the area of mind-control in augmented reality, Meta had already acquired CTRL-Labs for \$1 billion in 2019. The startup developed a wristband that can detect nerve activity in the wrist.

— SNAP

RANKING

TOP 5 INVESTMENT FUNDS BASED ON THE NUMBER OF UNICORNS IN THEIR PORTFOLIO

1. TIGER GLOBAL MANAGEMENT	191
2. SOFTBANK VISION FUND	132
3. COATUE	99
4. ACCEL	91
5. SEQUOIA CAPITAL	84

Source: Crunchbase

TOP 5 AUTOMAKERS IN 2021
(in number of vehicles sold and change on 2020)

1. TOYOTA	9,562,483
2. VW	8,882,346
3. HYUNDAI KIA	6,668,037
4. GM	6,294,385
5. STELLANTIS	6,142,200

Source: Factorywarrantylist

TOP 5 COUNTRIES FOR SUSTAINABLE DEVELOPMENT PERFORMANCE
(as measured by the Sustainable Development Goals Index from Cambridge University Press)

1. FINLAND	85.90
2. SWEDEN	85.61
3. DENMARK	84.86
4. GERMANY	82.48
5. BELGIUM	82.19

Source: Sustainable Development Report 2021 published by Cambridge University Press

KICKSTARTER



ORU LAKE

ORU LAKE

THE FOLDABLE KAYAK IS BACK BETTER THAN EVER

Oru Kayak continues to perfect its foldable kayak concept, inspired by Japanese origami. The California company has launched its fifth Kickstarter campaign for its newest model, and the latest campaign is one of the platform's biggest successes, with more than \$1.6 million raised. Weighing only 8 kg, Oru Lake is lighter than its predecessors and easier to unfold (and fold back up): the entire process takes less than two minutes, or even 1 minute with practice. This model is designed for paddling in lakes and can be used for more than 20,000 folds and unfolds, according to the company. When folded, the kayak measures just 107x25x46 cm and the foldable oar can be tucked inside. Everything can easily be transported inside the boot of a car – solving one of the biggest inconveniences of a kayak – or even checked onto a plane.

FUNDS RAISED
\$1,638,564

AVAILABLE
AUGUST 2022

semiconductors

INTEL SETS UP SHOP IN EUROPE



INTEL

Located in Leixlip, Ireland, Intel's Fab 34 factory is expected to be operational in 2023.

Intel unveiled the first phase of its large-scale investment plan in Europe, totalling €80 billion over 10 years. The American semiconductor manufacturer plans to build its European research and development facility at Plateau de Saclay, a technology hub south of Paris, often styled as the "French Silicon Valley". Intel's main plant will be in Magdeburg,

in Germany's Saxony-Anhalt region. The German site will have two production units and is expected to create 3,000 permanent jobs. Other plans under way at the tech giant include expanding its Leixlip factory in Ireland, for another €12 billion, and building an assembly and packaging facility site in Italy.

— INTC

N

-200'000

For the first time in more than a decade, Netflix lost subscribers – more precisely, 200,000 in the first three months of the year.



"Left Russia. Left Aeroflot. The old life is over"

Andrei Panov, deputy head of Aeroflot, Russia's largest airline, published on his Facebook on 12 March.

boom

SWISS EXPORTS: THE UNITED STATES BEATS GERMANY

Some of the COVID vaccines from American company Moderna are manufactured in Switzerland by Lonza, which has contributed to the increase in Swiss exports.

DAVIDE BONALDO / AFP



Over the last 20 years, Swiss exports to the United States have tripled, reaching 47 billion Swiss francs in 2021, according to a release from the Swiss Federal Customs Administration published in early April. That now makes the United States the primary recipient of Swiss products, dethroning Germany from its long-standing position in the top spot. From 2001 to 2021, trade in goods with the United States increased by an average of 6.3% annually, while exports to Germany increased by just 2.1% on average during this period and exports to Italy increased by 2%.

One thing to note is that this situation can be attributed to one particular sector: the pharmaceutical industry, which now makes up 64% of all Swiss exports to the United States. One of the reasons for such a high increase last year was the export of Moderna vaccines produced in Switzerland by Lonza.



+41%

Jump in consumer spending for the top 100 non-game subscription apps in 2021, from \$13 billion in 2020 to \$18.3 billion last year.

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SCANS



6.4 M

Number of kilometres travelled by autonomous vehicles on public roads in California in 2021, nearly double the distance travelled the previous year.

video games

AMAZON LUNA LAUNCHES INTO ORBIT



Developed by Polish studio One More Level, the *Ghostrunner* game is available on Amazon's cloud gaming platform.

GHOSTRUNNER

After months of testing, Amazon has officially launched its cloud gaming service in the United States. The standard subscription costs \$10 per month for access to more than 100 games with 4K streaming capabilities, including *Devil May Cry 5* and *Ghostrunner*. The launch confirms Amazon's gaming ambitions and comes on the heels of its two hugely popular game releases: *New World* in 2021 and *Last Ark* in early 2022. Unlike Google Stadia, which has been struggling to gain

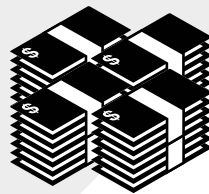
a following from gamers, Luna offers exclusives and free games that would be charged by Stadia on top of the subscription. That said, Amazon has plenty to contend with in facing off against Microsoft's Game Pass and its successful Xbox Cloud streaming platform (xCloud), which has forced Sony to overhaul its online subscriptions by merging its PlayStation Plus and PlayStation Now services to form PS Plus, set for release in June. — AMZN

THE FLOP

Sweeping food scandals

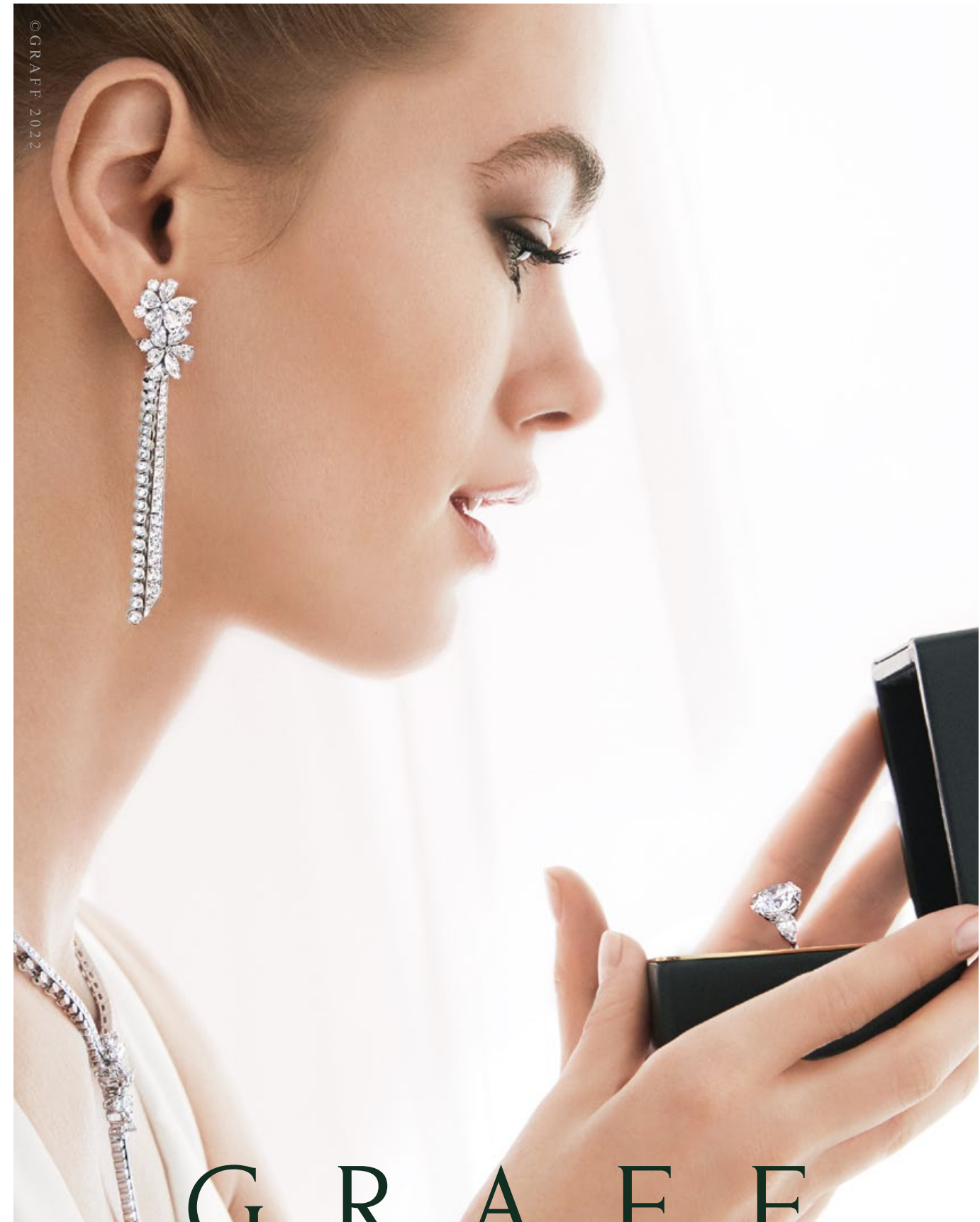
This year, Kinder Surprise eggs were noticeably absent from traditional Easter egg hunts. Just a few days before the holiday, Italian confectionery giant Ferrero launched a vast recall campaign for its flagship product in nine European countries (Belgium, France, Germany, Ireland, Luxembourg, the Netherlands, Norway, Spain, and Sweden) due to salmonella contamination. On 8 April, 150 cases of infection,

primarily in children under the age of 10, were recorded by European authorities. A few days before Ferrero, another giant was affected: in mid-March, Buitoni's Fraich'Up pizzas – a Nestlé group brand – had a massive recall due to an E. coli bacterial contamination, which can cause kidney failure in children and is likely linked to two deaths. Twenty-three countries, including Switzerland, were affected by the recall.



\$30,000 BN

The US national debt exceeded this eye-popping sum on 31 January.



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venture capital
FINANCE HELPING BLACK RHINOS



A baby black rhino rests between its mother's hind legs in Kenya.

In the works for five years, the Rhino Bond is a new type of bond that allows the private sector to invest in saving black rhinoceroses, which are at risk of extinction in South Africa. The World Bank issued a \$150 million loan for five-year bonds. Rather than paying interest to bond holders, the returns will go to the Addo Elephant National Park and the Great Fish River Nature Reserve

in order to fight poaching and improve living conditions for the animals. The buyers will not receive interest. That said, a bonus at maturity could be paid out (a maximum amount of \$13.76 million after five years), if the species preservation campaign is successful. If the black rhinoceros population remains stagnant or decreases, there will be no payment.

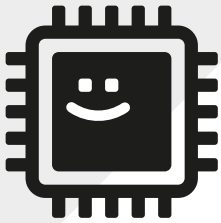
THE IPO

ALLEGO BURSTS ONTO THE NYSE

Specialising in charging stations for electric cars in Europe, Allego went public on the NYSE on 17 March via a merger with the SPAC Spartan Acquisition Corp III affiliated with the fund Apollo Global Management. The transaction was completed at a valuation of \$2.7 billion and \$160 million raised, far short of the \$702 million that Allego had hoped for. However, it is still considered a success in the current climate, as the share

price has already increased 45% in early April. The funds raised will help Allego expand its network of 28,000 public charging stations in the European market, where demand is expected to increase eight-fold by 2025 and 30-fold by 2030. Particularly present in western Europe and the Nordic countries, the Dutch company now plans to expand to central Europe and the Baltics in the medium-term.

— ALLG



+\$769 M

Total investment in semiconductor production by Bosch, which announced an additional \$296 million on top of the \$473 million already set aside for 2022.



“We’ll have another pandemic. It will be a different pathogen next time”

Bill Gates,
at the Munich Security Conference on 18 February.

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G R A F F



the figure
SABRINA SOUSSAN

A serial transformer at Suez

Position
CEO

Age
52

Nationality
French

After 20 years abroad, French citizen Sabrina Soussan has returned to France to lead the new Suez, which is now 60% smaller following Veolia's successful takeover bid. Far from being a typical member of France's elite, she instead has a degree from ENSMA, the mechanical and aeronautics grande école in Poitiers. The engineer, who preferred cranes to dolls – as she herself said in a feature by the magazine *Les Echos* – spent the majority of her career at Siemens, where she led various departments in Germany and Switzerland. In 2017, she became co-head of Siemens Mobility, which became the company's star department in terms of both sales and profitability following innovations she implemented from 2013. After a short stint in 2021 as CEO of Swiss company Dormakaba, she returned to France to lead the transformation of the new Suez, now refocused on its traditional business lines of water distribution and treatment, recycling and waste management. The group of 40,000 employees generated €6.3 billion in revenue in 2021.



the country
GREECE

The tech sector is taking off

Greece is almost as well-known for its financial difficulties as it is for its beaches, but the situation may be changing. Foreign companies are increasingly interested in Greece's technology sector. In fact, JPMorgan acquired a minority stake (49%) in the fintech Viva Wallet, valuing the company at \$2 billion and providing Greece with its first tech unicorn. Meta is also courting Accusonus, a startup whose audio software is used by Shakira and Bob Dylan. In 2021, investments in tech startups reached a record \$1 billion, double

Population
10,715,549
(2020)

GDP per capita
\$17,622,541
(2020)

Growth
-9.019% (2020)

Primary sectors
of the economy
tourism and
marine goods

the amount invested in 2020 and nearly 10 times higher than in 2015, when Greece was on the verge of bankruptcy. These figures are obviously far lower than the \$25 billion raised by London startups in 2021 and the tech sector only makes up 3% of GDP, but it does indicate that the measures taken as of 2019 by the conservative government, which made digital transformation a priority, are starting to pay off.

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ANALYSIS

SPECIALISTS' VIEWPOINT

INTERVIEW

“Distance learning has really come into its own”

Online learning platforms exploded in popularity during the COVID-19-related lockdowns. Now they are here to stay.

BY JULIE ZAUGG

Deborah Quazzo heads GSV Ventures, a US-based venture fund investing in education and workforce skills technologies. She sees the sector as wide open with potential, driven by the need to catch up on educational delays accumulated during the pandemic and by demand from emerging countries. Find out more in this interview.

Who are the main customers on online learning platforms?

Online learning is aimed at a variety of people. There are platforms for schoolchildren offering maths, reading and exam preparation courses. These options are particularly popular in Asian countries, where parents attach great importance to scholastic performance and believe extracurricular tutoring is a prerequisite for success in life. Other platforms target university students by offering MOOCs

(ed. note: Massive Open Online Courses), admissions management tools or internship portals. These are very popular in developing countries, such as India, which lack enough universities to meet the huge domestic demand. A third category of platforms is aimed at adults who want continuing education, as they do not always have the time or means to physically go back to school.

Is this now a global phenomenon?

Yes, definitely. Unlike the highly localised traditional education sector – where each country has its own schools and universities, **online learning platforms have no boundaries**. Even those created to serve a particular population end up exporting their services far and wide. Emeritus, an Indian portal that provides online courses in collaboration with top-notch

universities such as MIT and Cambridge University, now generates 30% of its revenue in the United States and 50% in the rest of the world (outside India). Online learning platforms have even started to gain a following in Africa, a continent with a growing GDP per capita and a young and growing population.

What impact has the pandemic had on the sector?

In the spring of 2020, 1.6 billion people suddenly found themselves immersed in the world of online education. This caused demand to explode for platforms active in the industry and triggered irreversible changes in behaviour. Schools quickly realised that they did not have the know-how to transfer all their courses online, and edtech websites helped fill that gap. Universities enjoyed a head start, as they began developing online content a

Where edtech all started

Online learning – also referred to as education technology, or “edtech” – began to take off around 2010 with the launch of the first platforms, including the US companies **Duolingo, Coursera and Course Hero**. These firms quickly drew interest through network effects. Moreover, their concept caught on while the first generation of “digital natives”, i.e., people who grew up using digital services, were in school. Since then, a cohort of online learning websites has joined the ranks, such as Byju and Emeritus from India, Udemy and Outschool from the United States, and GoStudent from Austria. Sector revenue is expected to almost double between 2021 and 2025, rising from \$227 billion to \$400 billion, according to Holon IQ.

decade ago, but they massively increased their offering during the pandemic. Eventually, the support programmes introduced in many states to enable schools to make up for students' accumulated learning losses will further benefit online learning platforms. For example, the Indian government has introduced new guidelines that make it easier to deliver online degrees. The United States and European countries have provided large grants to schools, and part of that will be invested in transforming their content into digital format.

Could these advances be peeled back as classes reopen in most countries?

Some of these gains will last. I don't think that schoolchildren and students will ever return to the classroom full time. Distance learning is now widely accepted and has really come into its own. As for teachers, they have made tremendous progress in this area. Meanwhile, the very model of continuing education has come under scrutiny. The days are over when a company used to send its employees to another city to attend a course, while covering their travel and accommodation expenses. Everyone realises that you can achieve the same results online.

Which companies dominate the sector?

There are half a dozen large listed groups, such as the US companies Coursera, Duolingo, Udemy and Course Hero, and the Indian company Emeritus. Alongside these large firms are unicorns that will probably soon go public, such as the Indian company Byju, which was valued at more than \$20 billion at the end of 2021, and the American companies Chegg and Outschool.

Other startups offer specific solutions that can be applied to the context of online learning. For example, Class is a virtual classroom that creates tools for use with Zoom, or ClassDojo, a student management tool that allows students to choose an avatar and interact with their teachers remotely.

Where will growth come from in the future?

In the primary school sector, it will come from students' significant learning delays accumulated during the pandemic. They will have to catch up over the years to come. In universities, growth will be fuelled by strong demand from developing countries. Continuing education will benefit from the upskilling required

to keep apace with the 3.0 economy. In this area, the US company Guild, which educates employees from Disney, Walmart or Amazon, is leading the way.

What about China, where the government took tough measures in the summer of 2021 banning edtechs from making profits?

The Chinese market is set apart. The companies operating there generally do not operate in other countries. Conversely, Western online learning corporations are not active in China. The government's crackdown therefore did not ripple globally. However, the large Chinese platforms such as New Oriental, TAL Education and Gaotu have lost most of their value.

What are the next challenges for online learning platforms?

The Chinese case shows that tension always exists between private companies and non-profit organisations in the field of education. Both India and the US have hinted at their intentions to introduce tighter regulations. For the moment, no concrete steps have been taken, but this could impact the many edtech platforms based in these two countries in the medium to long term. The success of these platforms also requires widespread access to high-speed internet, which is not yet the case in many African countries. The relatively high cost of the services available from these platforms is another obstacle to their expansion. However, several players have recently started to offer substantially lower prices, such as India's Physics Wallah, whose exam preparation services are 80% cheaper than the competition.

What would you say to an investor who wants to take positions in the sector?

I would advise potential investors to keep a close watch on unicorns on the verge of an IPO, like the Indian company Byju. **I'm also very optimistic about the growth potential of the US platforms Coursera and Duolingo**, which are firmly established in the sector and have a large and loyal user base. ▲



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INTERVIEW

A much-coveted Swiss franc

The franc is rising relentlessly compared to the euro. How high can the Swiss currency climb against its European counterpart? We ask the experts.

BY LUDOVIC CHAPPEX



CLAUDIO SCHWARZ

Against the background of rampant inflation in the eurozone and uncertainty due to the war in Ukraine, the Swiss franc is fulfilling its role as a refuge currency, to the point where the euro/CHF pairing is now nearly at parity. Some experts even believe that the franc is still significantly undervalued, such as German economist Klaus Wellershoff, who believes the Swiss currency will reach 0.80 francs per euro within two years, as he explained in an interview with *Finanz und Wirtschaft* on 19 March. Among the large banking establishments, the outlooks are more consensual, setting the real value of the franc at around 1.05 francs per euro on average. The estimates vary significantly based on the indicators chosen. We spoke with two experts who have opposite opinions: Michel Girardin, lecturer at the Geneva Finance Research Institute, and Richard Benson, Co-CIO of Millennium Global Investments.

The two interviews were conducted separately.

How do you see the franc evolving compared to the euro?

Michel Girardin: The value of the franc is expected to increase, given that inflation is increasing much faster in the eurozone. If we base it on the producer price index, which is currently increasing like crazy in the eurozone, the real value of the franc is expected to stabilise at around 0.90 francs per euro. For example, production prices jumped by 31% in January in the eurozone, compared to only +3.5% in Switzerland. This indicator seems more relevant to me than consumption prices.

The stronger franc is also linked to Russia likely defaulting on its debt, which, due to the contagion effect, could lead to a re-evaluation of the credit risk for various countries' debt. The franc is a refuge currency because we know that the situation in Switzerland is sustainable from that point of view, with only 40% debt compared to GDP. Investors fall back on a currency that they know has no risk of defaulting on sovereign debt.

Richard Benson: We believe that the franc is overvalued by approximately 20% compared to the euro. The current situation is the result of geopolitical tension, but in the medium term, if the fog of war dissipates, we expect the euro to go back up. We believe that the ECB will raise its rates in September of this year and the SNB will not – particularly because a strong franc can compensate for increased energy prices. This context should support the euro compared to the franc. If the ECB is ready, from a growth perspective, to raise interest rates once per quarter, I can see the euro reaching 1.10 francs.

How much room for manoeuvre does the European Central Bank (ECB) have with regards to inflation?

M.G. The ECB is faced with a dilemma because fighting inflation is a threat to growth. Given the strong inflation in the eurozone, the ECB will be forced to tighten its monetary policy before the SNB, which won't react. But will the ECB's actions strengthen the euro compared

to the Swiss franc? If we look back at past events, the answer is no. It doesn't matter that the interest rate of the franc is lower, or even negative. When it is a refuge currency, this argument is invalid. In the 1970s, the SNB was a pioneer in introducing negative interest rates. Foreigners had to pay to obtain francs. The negative rates were nearly -2% per quarter, and that didn't stop the franc from being very strong compared to the Deutsche Mark.

R.B. The spectre of stagflation – high inflation combined with weak growth – is indeed here. But it must also be said that growth in the eurozone is currently rather high after Omicron significantly impacted the continent at the start of the year.

I think that the ECB will raise rates in an extremely moderate way, around 1% or 1.5% over the next two years, which means that interest rates in the eurozone will remain very low, as they are currently at a negative level (-0.5%). As a result, I don't believe that these measures alone will cause a recession. It will be more of a normalisation than a re-tightening.

Furthermore, experience has shown that going from negative interest rates to positive interest rates, even if rates remain relatively low, has a much more significant impact than an increase of the same percentage above zero.

Will a strong franc protect the Swiss economy from inflation?

M.G. A strong franc is a safeguard. It's the main reason why Switzerland is spared from inflation. But this policy comes at a cost to the SNB. Euros keep accumulating on its balance sheet and they will soon be 150% of Switzerland's GDP. The SNB is now the most aggressive central bank in the world. In theory, such money creation should provoke inflation, but this is not always the case. Inflation is currently linked to costs, not to action by the SNB.

R.B. The SNB's situation is nothing like that of other central banks. In the eurozone, the inflation rate is three times higher than the target. The ECB is facing strong inflationary pressure, particularly due to the explosion of Russian natural gas prices and Germany's exposure to this resource. This situation also threatens growth. ▲



MICHEL GIRARDIN
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RICHARD BENSON
CO-CIO
MILLENNIUM GLOBAL INVESTMENTS

Crypto Chronicles Bitcoin: an environmental controversy

Critics and advocates of BTC face off about how it causes pollution.
Will green mining make everyone happy?

BY LUDOVIC CHAPPEX

Anti-Bitcoin opinions have multiplied in recent months. Coming from NGOs, political figures, research groups and economists, a sense of unanimity seems to have settled into public discourse, condemning what critics describe as the unjustifiable environmental cost of BTC. The arguments are well-known: mining cryptocurrencies that use the Proof-of-Work protocol requires enormous computational resources that generate CO₂. As stated in an opinion piece published in February by the Rousseau Institute, a French think-tank that promotes political ecology, Bitcoin mining consumes more electricity annually than a country like Switzerland or Belgium. The letter, signed by more than 170 economists, experts and scientists, is just one of many similar initiatives. The latest media buzz is the “Change the code, not the climate” campaign launched in late March by Greenpeace, with support

from the co-founder of Ripple (XRP), Chris Larsen, which implores Bitcoin miners to abandon the Proof-of-Work protocol for a more eco-friendly method (called Proof-of-Stake).

Bitcoin mining currently makes up less than 0.1% of total energy consumption on the planet

But there are others, though fewer and less visible, who believe that this perspective is too reductive and refuse to switch to Proof-of-Stake. The main argument for BTC defenders is based on assessing its energy cost with regards to its utility, and comparing this to other sources of pollution: “The amount of energy currently used by Bitcoin is similar to

the cruise ship industry, but Bitcoin is used by more people,” argues the engineer and economist Lyn Alden in a long, heavily-researched publication with a bold title: “Bitcoin’s Energy Usage Isn’t a Problem. Here is Why.” The young investment advisor, followed by 400,000 people on Twitter, doesn’t deny that Bitcoin consumes a lot of energy, but she says that’s also the case for YouTube, Netflix, Facebook and Amazon, or Christmas lights, or private jets around the world. In other words, by focusing on the gross energy consumption of BTC, we are not considering the big picture.

To put things in perspective, Bitcoin mining currently makes up less than 0.1% of total energy consumption on the planet.

According to the Bitcoin Electricity Consumption Index from the University of Cambridge, a benchmark index, Bitcoin currently consumes

142.84 terawatt -hours of electricity per year. That’s either very little, or already far too much, depending on the point of view.

Faced with this great debate, the industry is taking action. To reduce the environmental impact of the Proof-of-Work process, microprocessor manufacturers have started to optimise their dedicated mining products. Intel made headlines in early April when it announced the launch of a new chip, named ASIC Blocksage, estimated to be 15% more energy efficient than the competing professional solutions.

But the real revolution – which could reconcile Bitcoin partisans and critics – will likely be the systematic use of green energy, or surplus energy, for all BTC mining operations. Among those currently carrying out experiments is oil company ExxonMobil, which has been working on a pilot project in

North Dakota since the start of the year, in which it uses the surplus of natural gas it produces, according to a CNBC article published in late March. The gas is sent to generators that convert it into electricity, which is then used to supply mining farms installed in containers. Normally, surplus gas is burned around oil wells – a technique called flaring – since there is no pipeline that could send it elsewhere. ExxonMobil hopes to reproduce this programme internationally if the pilot is successful.

From a more environmentally-friendly perspective, the use of green energy sources is also becoming more widespread. In fact, using surplus hydroelectric energy to supply mining farms is now a common practice in the industry.

In early April, a milestone was reached with the announcement of a new Bitcoin mining centre in Texas that is entirely powered by solar

energy. The project, which will be launched in June, is jointly led by the tech companies Blockstream and Block (formerly Square). And none other than Tesla is providing the solar panels and battery system to power the centre. The goal is for the centre to use excess energy capacities, with the majority of energy produced used for consumption by individuals and companies. One of the project’s novel ideas is that an online dashboard will be made available to the public. It will constantly display information on the number of Bitcoins mined and current energy production and electricity consumption. This philosophy is summed up in a press release by Adam Back, CEO of Blockstream: “This is a step to proving our thesis that Bitcoin mining can fund zero-emission power infrastructure and build economic growth for the future.” Now the only thing left to do is get an endorsement from Greenpeace. ▲



Calida, in search of cool

The Lucerne-based company is trying to abandon its old-fashioned image. It has radically restructured its undergarments business and is focusing on online sales.

BY JULIE ZAUGG

During the presentation of its 2021 annual results, Calida's CEO Timo Schmidt-Eisenhart didn't hide his enthusiasm: "2021 will go down in history as the most successful year in the history of our company," he said. Sales were up 20% and profits up 43%, while the operating margin was up 8.1%.

The company, based in Sursee in the canton of Lucerne, is completely reinventing itself. In 2019, it sold its winter clothing brand Eider, then in 2020 it sold surf brand Oxbow, and in early 2022 it sold its mountaineering equipment brand Milet, ending ▶



A family-style photoshoot from a recent press campaign by Calida.

CALIDA

IN NUMBERS

1941

Date of establishment

27%

The percentage of sales generated online, up 26.7% compared to the previous year

CHF 298 M

Revenue generated in 2021, resulting in record profits of 24.3 million Swiss francs

+37%

The increase in Calida's share price from March 2021 to 2022



An employee works at the headquarters of the French women's lingerie company Aubade, a subsidiary of Calida, in Paris, 4 January, 2019.

LIONEL BONAVENTURE / AFP

approximately 15 years of diversification. However, the group held onto its brands Calida, Aubade and Lafuma Mobilier.

"We want to focus on our core competencies in lingerie and underwear," says Schmidt-Eisenhart. "This will allow us to strengthen our brands and create synergies between them." In 2021, the Calida brand generated 152.7 million Swiss francs in sales (+12.8%) and Aubade generated 72.2 million Swiss francs (+28.8%). The two brands represent three-quarters of the group's income.

Lafuma Mobilier, the outsider (ed. note: garden furniture specialists) remains within Calida due to its high profitability. "This segment supports the growth of the entire company, allowing it to generate numbers that would be difficult to reach if Calida was operating solely in the saturated fashion market," says analyst Gian Marco Werro from

Zurich Cantonal Bank, who covers Calida. He believes, however, that the company will eventually part with it in order to focus on what it does best – undergarments, leggings, pyjamas and loungewear.

"Undergarments are an ideal type of clothing to purchase online"

Gian Marco Werro, analyst at the Zurich Cantonal Bank

The ongoing revolution at Calida is also modernising the group. Founded during the Second World War to create knitwear protecting Swiss people from the cold, it is now known for its easy-to-wear undergarments – Y-fronts for men, cotton bras and

underwear in comfortable cuts for women – as well as its famous single-coloured pyjamas with elastic trim to stay close to the body during long winter nights.

Sidelined by competition from fast-fashion groups such as H&M at the end of the 1990s, Calida halted its entire production in Hungary in 2003. It also began a diversification strategy that led to the acquisition of athletic wear companies that it just recently sold off, and gradually moved away from its original spirit: "Until recently, Calida suffered from a slightly old-fashioned image, as a brand for 'practical' pyjamas that your mum would buy your dad for Christmas," says Suzanne De Freitas, an independent designer based in Geneva. "But that's starting to change. The brand has innovated quite a lot in recent years, featuring more feminine materials such as lace and sexy cuts such as the tanga," says the designer. "It has

also collaborated with haute couture brands known for their extravagant and avant-garde style, such as Viktor & Rolf."

The 2020 collection produced by the Dutch brand includes pyjamas with Volants, one of its trademarks, jumpers with the slogan "We want a better world" and brightly coloured boxer shorts with geometric designs. Calida has also invested in the athleisure trend, which became even more prominent during pandemic lockdowns, with yoga pants, sports bras and hoodies.

The Parisian brand Aubade, acquired in 2005, is Calida's sexy segment, which reaches another type of consumer without compromising its identity, founded in comfort and natural fabrics. "Aubade is associated with a luxurious image, attention to detail and sophistication," says designer Laurie van Jonsson, a lingerie expert. "It operates in the same segment as the Italian brand La Perla, but at a slightly lower price point." Aubade is also hosting several collaborations with leading houses such as Karl Lagerfeld and trendy designers such as Iris van Herpen.

To attract a young and urban clientèle, Calida is also focusing on e-commerce. "In 2017, the group acquired Reich Online Services, which specialises in online lingerie sales, and as a result, Calida gained significant knowledge in the field and was able to implement an ambitious e-commerce strategy," says Gian Marco Werro of Zurich Cantonal Bank. The Swiss company now generates nearly one-third of its sales online, compared to one-tenth in 2018, which is a particularly high percentage in the fashion world. Internationally, 84% of sales are generated online.

"Undergarments are an ideal type of clothing to purchase online," says the analyst. "As long as you know your size, you generally don't need to try

them on and these products are often given as gifts." Calida has a very low return rate, around 8% to 14%, compared to 25% to 40% for other clothing brands active online.

"We invested very early on in developing our e-commerce capacities,"

says CEO Schmidt-Eisenhart. "This strategy was very effective during the pandemic, when stores were closed." But the group hasn't given up its retail shops either. "We have implemented a multi-channel strategy in order to best meet our customers' needs," says the CEO, specifying, >



Pyjamas according to Calida (seen here in a Seventies period poster).

CALIDA

however, that the group would like to achieve 50% of sales online by 2026.

BIODEGRADABLE T-SHIRT

Another direction taken by the Lucerne-based company, with 2,820 employees worldwide, involves environmental awareness and ethical commerce. Calida was a pioneer when it released its entirely biodegradable T-shirt in 2018. This was followed by the launch of a 100% natural line made from Tencel Lyocell, a material created from wood pulp from sustainable forests, sold by Austrian company Lenzing. It requires less water and energy than other synthetic fibres and claims to be 100% compostable, including dyes, thread and tags. Once the product has reached the end of its lifespan, it can be added to the compost pile and will break down into organic nutrients within a few months.

Additionally, nearly half (42%) of Calida's products are certified by Oeko-Tex's Made in Green Label. "This certification goes a lot further than certifications held by the competition," says analyst Werro. "It follows the entire production chain to specify which ingredients make up the fabrics and the working conditions in the factories used by the group and its suppliers." A QR code specific to each article of clothing

Packaging of Calida's 100%-compostable undergarment.



KEYSTONE

can even retrace the steps of the production process.

Aubade has also released its Softessence line, made of 100% recycled materials. And Lafuma Mobilier stands out because it allows customers to purchase replacement parts to repair its furniture, rather than replace them with new parts. The Swiss company doesn't plan to stop there. It is aiming to double

its organic growth to 4-6% with an operating margin of 10% by 2026. To achieve this, it needs to gain market share from its competitors, which are brands such as Schiesser, Hanro, Calzedonia and H&M for Calida and La Perla, Agent Provocateur, Etam and Victoria's Secret for Aubade.

"We are going to increase our investments in our key brands by 30% to promote international expansion," says Schmidt-Eisenhart. The company exports its goods to 70 countries but currently generates 70% of its sales in Switzerland, Germany and France.

Calida also wants to make targeted acquisitions, "prioritising high-growth brands in the lingerie and undergarment space" according to the CEO. Just recently, in February 2022, the group acquired German start-up Erlich Textil for 10 million Swiss francs. With products sold exclusively online, environmental commitments and models in all shapes and sizes – a prerequisite for Generation Z – it is a perfect match for the Swiss group. ▲

ANALYST ADVICE

"THE SHARE PRICE COULD REACH 66 SWISS FRANCS"

Calida's recentring will have a positive impact on its growth in the medium term. "The group has found its niche and skilfully operates within it, focusing on high-quality, sustainable undergarments, and has put in place an omni-channel distribution system that can produce its products in an efficient way," says Gian Marco Werro, analyst at Zurich Cantonal Bank. That should allow Calida to increase its margins, which have

already grown substantially in recent years. The analyst is more prudent regarding the 4% to 6% organic growth targeted by the group, thinking it to be optimistic, and believes Calida has a weaker social media communication strategy than its competitors. That said, he does recommend purchasing shares, and estimates that share prices could reach 66 Swiss francs, compared to 52 francs currently.

— CALN

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DOSSIER

THE WAR THAT THREATENS THE WORLD

Russia's invasion of Ukraine shocked the global economy, which was still struggling to recover after the pandemic. Whatever the end result, the world will never be the same.

BY BERTRAND BEAUTÉ

32. Swiss companies facing the war

42. Interview with Johann Reiter, CEO of Vetropack

48. Infographic: the brazen resilience of the markets

50. A brutal come-down expected for Europe

54. Infographic: Russia, a raw materials giant

56. Interview with Clive Burstow, head of Global Resources at Barings

In the fog of war, it's difficult to make predictions. Economists are reduced to educated guesses. Five scenarios are possible: a peace treaty is negotiated, the Ukrainian army falls, Russia loses, a stalemate, or, worst-case scenario, the war spreads to other countries. The probability of any of these outcomes changes based on newcomers to the battlefield, information from intelligence services, and limited diplomatic advances.

In its most recent forecasts, the Swiss Economic Institute (KOF) offers two possibilities: 2.9% economic growth for Switzerland in a favourable scenario (the war remains limited to Q2 2022), or only 1% growth in an unfavourable scenario (stalemate with a complete halt to Russian energy and raw materials exports). "The war in Ukraine is a major risk," warned Heiner Mikosch, an economist at KOF, in a press release. "If this war

and sanctions continue and Russian exports of raw materials to Europe stop, Europe will be hit with a strong recession."

Despite this uncertainty, all analysts agree on one point: "While the situation remains highly fluid and the outlook is subject to extraordinary uncertainty, the economic consequences are already very serious," said Kristalina Georgieva, managing director of the IMF, in a statement. And these consequences will be felt over the long-term: "Even though the war is expected to de-escalate, nothing will be the same as it was before," said Stéphane Monier, chief investment officer at Lombard Odier, in a note published in mid-March by the bank. Western countries have radically modified their strategic positions in terms of defence and energy. Moreover, said Monier, "some sanctions will remain in place for as long as Mr Putin remains in the Kremlin." ▲

Dossier prepared by
Bertrand Beauté
and Ludovic Chappex

WAR AND BUSINESS

The economic consequences of the conflict in Ukraine vary for Swiss companies. Here is an overview...

BY BERTRAND BEAUTÉ

Likely impact on revenue



Negative



Neutral



Positive

Novartis

A committed pharma

The drug giant has stopped its investments in Russia, but continues to supply medicine there in order to treat patients.

“Novartis condemns the war in Ukraine. This unprovoked act of violence harms innocent people.” The Basel-based pharma giant took a clear stance against Russia in a press release on 4 March. While Novartis continues to send medicine to Russia, it has suspended all investments and promotional and advertising activity, as well as the launch of new clinical trials. The company has a production site in Saint Petersburg, which has nearly 2,000 employees.

Furthermore, Novartis has approximately 500 employees in Ukraine. For ethical reasons – patients need their medicine wherever they live in the world – Western sanctions do not cover the pharmaceutical industry, which makes up 52% of Swiss exports to Russia (see infographic on p. 51). Like Novartis, global pharma leaders such as Roche and Sanofi continue to ship their products to Moscow.

FOUNDED
1996

HEADQUARTERS
BASEL (BS)

EMPLOYEES
108,000

2021 REVENUE
\$51.63 BN



KEYSTONE

Workers assemble a carriage at the Stadler Rail factory in Fanipol, Belarus, in 2014.

Stadler Rail

Shunted by sanctions

The Thurgau-based manufacturer of railway rolling stock has begun to move some of its production from its factory in Belarus to Poland and Switzerland.

On Tuesday 15 March, during the presentation of its annual results, train manufacturer Stadler Rail had a raft of good news for investors: a full order book (17.9 billion Swiss francs, up 11% over one year), excellent revenue (3.6 billion Swiss francs, up 18%) and solid profits (224 million Swiss francs, up 6.2%). But these

attractive results were overshadowed by current events and particularly by Stadler Rail’s criticised presence in Belarus – a country allied with Moscow and subject to international sanctions.

The Thurgau-based group has a factory in Fanipol, about 30 km from the capital, Minsk, which has more than 1,000 employees. Opened about a decade ago in a climate of “political rapprochement”, according to the company, the site manufactures trains and trams primarily for former-USSR countries. Fanipol contributes nearly 10% of the group’s total production capacity. Despite international

pressure, “Stadler will not abandon its employees and will maintain its factory,” wrote the company in its annual report.

Nevertheless, the current situation is forcing the group to adapt, particularly because international sanctions prohibit Stadler from sending electronic components to its factory. The manufacturer came up with a social plan for its Belarus location, and part of production is currently being relocated to its Siedlce factory in Poland and also to Switzerland.

Will this result in delays? “Less than 2% of Stadler Rail orders,

which are worth 17.9 billion Swiss francs, are manufactured locally, and this could be reduced even further to ensure that production is not delayed due to relocation,” reassured the company in its annual report.

The company, which has no transactions from Russia or Ukraine in the books, could still be impacted by rising raw materials prices and inflation, both associated with the war. In conclusion, “the financial impact cannot yet be completely evaluated and depends largely on how the situation evolves,” said the group in its annual report.

FOUNDED
1942

HEADQUARTERS
BUSSNANG (TG)

EMPLOYEES
13,000

2021 REVENUE
CHF 3.6 BN





Kühne+Nagel

A ship in the storm

The logistics giant has stopped all goods shipments to and from Russia.

Empty Russian ports, some ships blocked in the Black Sea, no-fly zones over Russia, soaring fuel prices... There are so many repercussions of the war that are disrupting global goods transport. Active in the logistics sector for air, maritime, rail and road transport, Swiss giant Kühne+Nagel is very cautious regarding its 2022 outlook after a record year in 2021. "Up until now, the outlooks were favourable," said Detlef Trefzger, CEO of Kühne+Nagel, during a presentation of the company's annual results on 2 March. "But Russia's acts of war have highlighted the unpredictable nature of geopolitics, and it is too soon to analyse the subsequent effects on economic development."

Like Danish group Maersk, the global leader in maritime freight, Kühne+Nagel announced it was suspending all operations in Ukraine,

as well as transport to and from Russia, except for pharmaceutical, medical and humanitarian products. Kühne+Nagel did not provide exact numbers, but for its French competitor CMA CGM, for example, business in Russia, Ukraine and Belarus accounts for approximately 600,000 20 ft containers per year, or 2% of its annual revenue.

And the consequences extend far beyond country borders. "The closure of airspace above Russia and Ukraine and the ban on Russian planes over North American and European airspace have led to capacity restrictions and longer delivery delays. Some long-haul flights, particularly in the Eurasian hemisphere, now take three hours longer than usual," said Kühne+Nagel. The company also had to close reservations for rail transport (Eurasia Express) to and from Europe, as

these trains pass through the Russian Federation.

As for maritime transport, the war in Ukraine could create workforce shortages, said the International Chamber of Shipping (ICS) on 11 March. The ICS represents 80% of the global shipping fleet. Indeed, 14.5% of merchant seamen, or 1.89 million people worldwide, are Ukrainian or Russian. Some of these professionals are stuck in their respective countries and can no longer work. This slows the global economy, as 90% of goods are transported by sea. For the time being, however, the crisis has not yet resulted in higher shipping prices. According to the Freightos Baltic index, the average price to transport a 20 ft container on the main maritime routes is now \$9,300. That's six times higher than in 2020, but the same price as in January 2022.

Sea freight is being affected by soaring fuel prices, trade sanctions and a possible war-related shortage of seamen. Here, the Altenwerder container terminal in Hamburg, one of the ports where Kühne+Nagel operates.

FOUNDED
1890

HEADQUARTERS
SCHINDELLEGI (SZ)

EMPLOYEES
78,000

2021 REVENUE
CHF 32.8 BN

KNIN

Glencore

A steely resolve

The commodity trading and mining giant is benefiting from soaring prices for raw materials.

Since 24 February, the day that Russia invaded Ukraine, Glencore's share price has increased by nearly 20%. The world's largest trading group operates cobalt, nickel and aluminium mines – metals whose price has soared since the start of the war (see infographic on p. 54). This boosts Glencore's profits, especially given that the Zug-based giant does not have any mines in Russia or Ukraine that could be threatened by the conflict. "Glencore has no operational footprint in Russia and our sales exposure is not significant," said the group in a press release on 1 March.

But there are still a few grey areas: the Swiss company still trades a large amount of aluminium produced by the company Rusal, and it also trades

other raw materials from Russia, particularly petrol. Glencore also holds a 10.55% stake in aluminium producer En+ and a 0.57% stake in petrol giant Rosneft – two Russian companies that are affected by international sanctions. "We're re-examining all our business in Russia, including our holdings in En+ and Rosneft," said the group. On 28 February, those holdings were worth \$645 million for En+ and \$183 million for Rosneft. These will now be difficult to sell: since 3 March, trading in the two companies has been suspended on the London Stock Exchange.

FOUNDED
1974

HEADQUARTERS
BAAR (ZG)

EMPLOYEES
135,000

2021 REVENUE
CHF 203.8 BN

GLEN



Largely due to the war in Ukraine, copper prices are reaching record highs. Here, a Glencore copper mine, in Altonorte, Chile.

An employee works in one of Komax's factories.



KOMAX

Alcon

An eye on the conflict

The Geneva ophthalmic device expert continues its activities in Russia.

At the time this article was written, the Geneva-Texan ophthalmic giant Alcon has not officially released a statement on the consequences of the war on its business. The only known fact is that the company has a production site for cataract surgery lenses in Zelenograd, near

Moscow, as well as a location in Ukraine. Like the rest of the pharmaceutical industry, Alcon is likely to maintain its activities in these countries, for ethical reasons.

FOUNDED
1945

HEADQUARTERS
VERNIER (GE)

EMPLOYEES
24,000

2021 REVENUE
\$8.29 BN

ALC

Komax

Rising demand

This automotive industry giant benefits indirectly from the closure of Ukrainian factories.

Last year, €760 million-worth of electric cables destined for the European aeronautics and automotive market were produced in Ukraine, according to the European Association of Automotive Suppliers (CLEPA). This type of part is essential to the industry. For example, a saloon such as the Porsche Panamera contains several kilometres of cable bundles. The problem is that the war has

shut down many Ukrainian factories, which were Europe's main source for cables.

This situation is indirectly profitable for the Lucerne-based company Komax, a global leader in machines that set, cut and test electric cables (the wire processing market). Indeed, cable manufacturers that are primarily based in Ukraine need to quickly find new machines in order to increase production at other sites. A few days before the start of the war, Irish group Aptiv moved its cable production to Poland, Romania

and Serbia. "The present situation in Ukraine is resulting in high demand among customers for replacement machines," confirmed Komax in a press release published on 15 March, saying for that reason, "a quantitative forecast can currently not be made for the 2022 financial year."

FOUNDED
1975

HEADQUARTERS
DIERIKON (LU)

EMPLOYEES
2,128

2021 REVENUE
CHF 421 M

KOMN

INTERVIEW

"There's no alternative to stocks"

While many assets are in the red, equity valuations have increased since the start of the war. We hear from experts...

BY BERTRAND BEAUTÉ

Barely a month did it take for the SMI – the benchmark index of the Swiss market that includes the 20 largest Swiss capitalisations – to digest the outbreak of war in Ukraine. On 23 March, it had already exceeded 12,000 points, an increase of around 2% compared to its value on 23 February, the day before Russia invaded Ukraine. At the time this article was written, most European and American indices have also returned to their pre-war levels, with the SMI lagging just a bit behind. Will this trend last? The experts we spoke to for this issue help us decide.

How is it that stocks continue to increase in an uncertain context, with staggering inflation and the war in Ukraine?

"Returns on government bonds, which are traditionally safe assets in times of crisis, have been very low in recent years in Europe and the United States. As a result, they are less of a safe haven now than they were in previous cycles. For example, returns on 10-year US bonds are currently 2.36%, which, taking inflation into account, represents a real loss for investors at maturity," says Alan Mudie, chief investment officer at Woodman Asset Management. "In

this context, even if stocks are risky, investors are choosing them because there's no other option." In other words, the well-known acronym TINA ("There Is No Alternative") partly explains the rise in the stock market.

Will the increase continue?

"If inflation falls and central banks continue to raise their rates, high-quality government bonds could become interesting in the long-term," says Mabrouk Chetouane, head of Global Market Strategy at Natixis Investment Managers. Furthermore, stocks could be penalised if a recession occurs: "It's uncertain if global growth will be sufficient to pull valuations higher in 2022," says Hubert Lemoine, director of investments at Schelcher Prince Gestion.

Are Swiss stocks preferable?

"In times of crisis, the Swiss market is high-quality and serves as a defensive refuge for investors," says Eleanor Taylor Jolidon, co-head of Swiss and global assets at Union Bancaire Privée (UBP). "That partly explains why Swiss assets were better able to withstand the start of the war than their European counterparts. Since they are geographically further from the conflict, American stocks were also less impacted."

What is the best management strategy in this scenario?

"Indices like the SMI mask the differences, especially in this crisis period during which the disparity in performance between each share is significant," says Eleanor Taylor Jolidon. "Investors should focus less on indices and adopt an active management strategy. Look at each asset based on its quality, its dependence on raw materials, its ability to echo price increases, its exposure to the Russian market, etc." For example, the shares of the pharmaceutical group Roche appreciated by nearly 15% between February 23, the day before the invasion, and April 15, while that of Geberit plunged by 6.5% over the same period.

Which sectors are best right now?

"The crisis will likely push Europe to reinvest, particularly in defence and energy," says Lemoine. "From this perspective, the war has been a boon for assets active in renewable energies (RE). So we could imagine that the current crisis will accelerate the energy transition, or even an inexorable shift to REs. But solar and wind are not enough. Other sectors, such as nuclear, green hydrogen and liquefied natural gas, will also benefit from this shift."

Zurich Insurance

A Z logo

While the insurer does not have much exposure to the Russian market, it could be subject to indirect effects from the war.

The story could be funny, if it was not associated with the deadly conflict in Ukraine. On Sunday 27 March, Zurich Insurance announced it would temporarily pull its logo off social media – a white Z on a blue background – so as to not be suspected of supporting Moscow. The letter Z, plastered on Russian military vehicles used in the conflict, has become a symbol of support for the Russian Federation army.

Beyond this anecdote, the Swiss insurer does not seem very exposed to the Russian market. In 2014, the company sold part of its business focused on private clients in Russia to OLMA Group, and pulled out of the Nord Stream 2 pipeline project in 2021. The insurer, which maintains corporate clients in Russia, confirms that it is acting “quickly to ensure that it is in total compliance with the current sanctions, regardless

of the operational complications and financial implications.” While Zurich Insurance did not disclose exact figures, French insurer Axa and Swiss group SwissLife have said that their exposure to Russian markets is minimal, only €200 million and 60 million Swiss francs, respectively. Nevertheless, most insurers could suffer indirect consequences as a result of the conflict, particularly due to their corporate clients in the aviation and marine industries, which were both impacted by international sanctions. For example, Lloyd’s of London, of which only 1% of revenue comes directly from Ukraine and Russia, estimates that the war will have “major” consequences on the insurance industry and it is “difficult to evaluate the total financial impact at this early stage.”

FOUNDED
1872

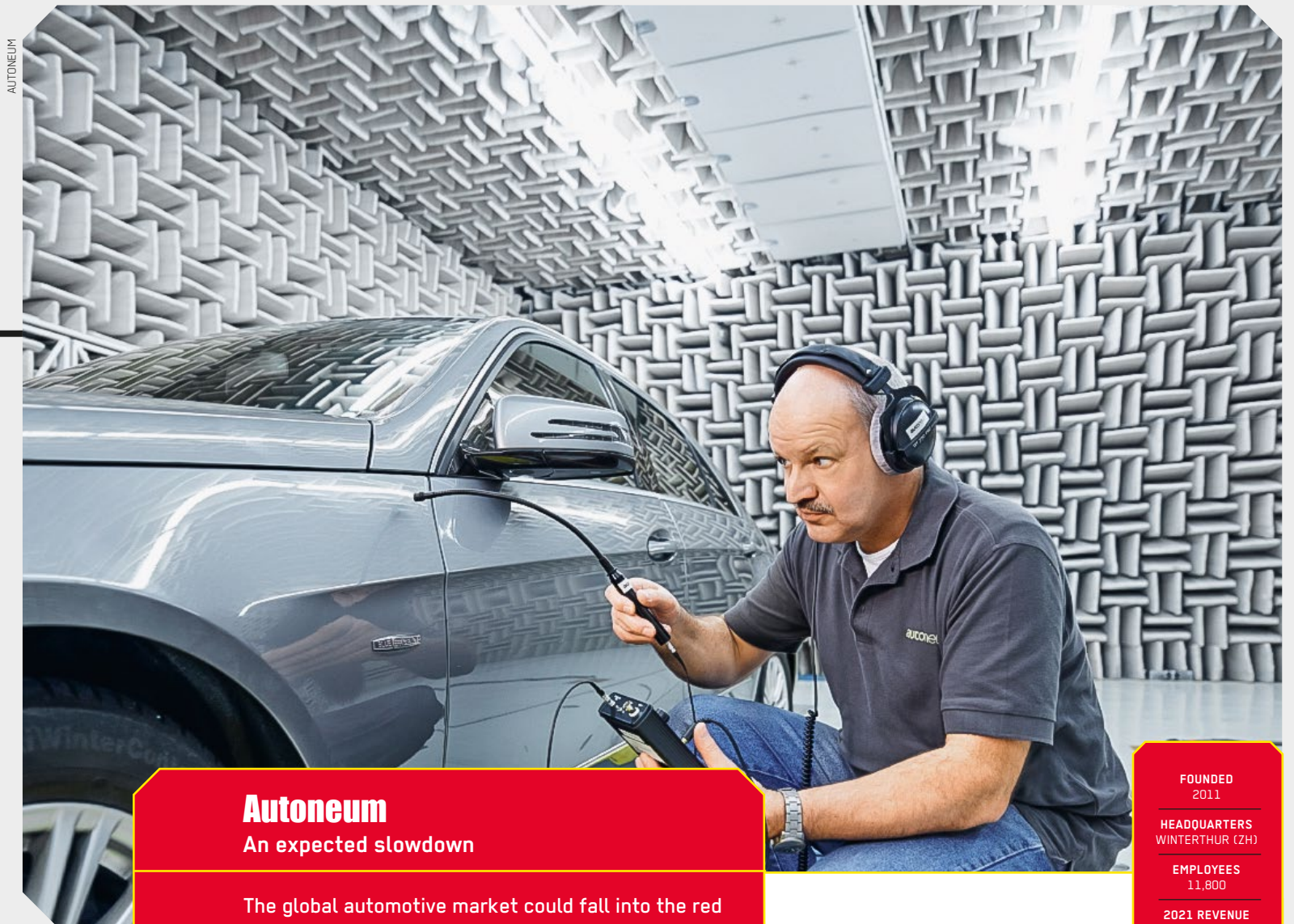
HEADQUARTERS
ZURICH (ZH)

EMPLOYEES
56,000

2021 REVENUE
CHF 70.7 BN

ZURICH

An Autoneum worker measures the exterior noise of a vehicle. The company specialises in the acoustic and thermal insulation of cars.



Autoneum

An expected slowdown

The global automotive market could fall into the red in 2022 due to repercussions from the war.

FOUNDED
2011

HEADQUARTERS
WINTERTHUR (ZH)

EMPLOYEES
11,800

2021 REVENUE
CHF 1.7 BN

AUTONEUM

ABB

A quick decision

The Zurich-based engineering and automation group was one of the first to stop business in Russia.

“As a result of supply chain disruptions and other logistics, ABB has temporarily paused the intake of new orders and all operational activity affected by shipments in and out of Russia, Ukraine and Belarus.” As of Wednesday 2 March, the Zurich-based group announced via the platform Swissinfo that it was pulling out of various markets, becoming one of the first industrial companies to officially act. It has two production sites in Russia, which generate approximately 1% to 2% of its revenue, as well as two branches in Ukraine, in Kiev and Lviv.

FOUNDED
1988

HEADQUARTERS
ZURICH (ZH)

EMPLOYEES
105,000

2021 REVENUE
\$28.9 BN

ABB

In its annual report published on 2 March, Swiss equipment manufacturer Autoneum said it was expecting the automotive market to grow 9% in 2022 compared with 2021 and that its revenue would increase as a result. The problem is that these predictions were made in early February, before Russia invaded Ukraine. Do they still hold true? “Subcontractors in the automotive industry are 100% dependent on sales from manufacturers,” says Eleanor Taylor Jolidon, co-head of Swiss and global assets at Union Bancaire Privée (UBP). “The Ukraine crisis could affect sales,

which were already low since the start of the year due to the parts shortage.”

For example, Autoneum is a supplier to Renault, which had to leave Russia in March. The French group has three assembly plants in Russia, in which 500,000 cars are produced each year. The Swiss specialist in acoustics and thermal management also has German customers such as Volkswagen and BMW, which have already had to shut down some of their production sites due to cable supply chain issues coming from Ukraine.

According to a note from the firm Standard & Poor’s (S&P) published on 22 March, global vehicle sales are expected to decrease by 2% in 2022, compared to an increase of 4% to 6% predicted before the war.

Furthermore, Autoneum has a production site in Russia, in Ryazan, 200 km from Moscow, which could be affected by international sanctions. “For the time being, the impact of the Ukraine crisis on our business cannot be estimated,” said Autoneum in its annual report.

Clariant

A lab at a complete stop

The Basel-based chemistry group faces increased energy prices.

Clariant, one of the global leaders in chemical products and pigments for textiles, announced on 4 March that it was suspending all activities in Russia, effective immediately. That includes a sales office and a laboratory in Moscow, which generate nearly 2% of the group's revenue. Clariant also has a catalyst production site in the Ukrainian region of Louhansk, where war is raging, with 146 employees. In addition to its business that is directly affected by

the war, the Swiss company also faces increased energy prices. The chemical industry uses a lot of energy, because it uses oil and gas both as an energy source and as a raw material. As early as December 2021, Clariant had to raise prices by 25% to 35% in EMEA (Europe, Middle East and Africa), in order to incorporate the rising cost of raw materials, energy and transport.

FOUNDED
1995

HEADQUARTERS
MUTTENZ (BL)

EMPLOYEES
18,000

2021 REVENUE
CHF 4.37 BN

CLN

Bucher

A protected farmer

The war in Ukraine has repercussions for the entire agricultural world, with a spike in the price of cereals and fertilisers.

When the annual results were presented in early March, the management of the agricultural machine manufacturer Bucher Industries wanted to be reassuring, indicating that the conflict in Ukraine is not a direct threat to the financial health of the company. Last year, Bucher generated 70 million Swiss francs in sales in Russia and Ukraine, with a total revenue of 3.2 billion Swiss francs. The company has a production and assembly site in Russia that employs 140 people and a distribution centre in Ukraine with approximately 30 employees.

Nevertheless, while it is not directly affected by the conflict, the

Zurich-based company could be subject to the long-term effects of the crisis. The agricultural industry as a whole faces soaring energy and fertilizer prices. "In 2021, Russia was the primary exporter of nitrogen fertilizers and the second-largest supplier of potassium and phosphorus fertilizers," says the United Nations Food and Agriculture Organization (FAO). With their margins destroyed by price hikes, farmers could delay purchasing farm equipment, which could affect Bucher's business.

FOUNDED
1807

HEADQUARTERS
NIEDERWENINGEN (ZH)

EMPLOYEES
13,000

2021 REVENUE
CHF 3.18 BN

BUCH

A worker checks the quality of solar modules in Meyer Burger's test laboratory in Freiberg, Germany.

Meyer Burger

A place in the sun

The Bern-based solar expert is expected to profit from high demand for renewable energies.

Since the start of the crisis, energy prices have exceeded expectations. The price of a barrel of oil has now settled in for the long term above the symbolic threshold of \$100 (with peaks close to \$140) and gas has reached exorbitant prices on the market. "The war in Ukraine has highlighted Europe's significant dependence on Russian oil and gas," says Hubert Lemoine, director of investments at Schelcher Prince Gestion. "Eurozone countries import 40% of their gas from Russia – a figure that has crept up to nearly 60% for Germany."

Since the start of the conflict, Europe has tried to rid itself of this cumbersome dependence, and part of the solution will come from renewable energies. Investors made the right choice. "Renewable energies experts were the first to benefit from the crisis," says Lemoine. The share price of Chinese group JinkoSolar, the world's largest solar panel manufacturer, went from \$40 on 23 February – one day before the invasion – to \$50 on

28 February, a 25% increase in only five days. Over those same five days, Danish specialist in offshore wind turbines Orsted saw its share price increase 30%.

Even Swiss solar module company Meyer Burger, which had questionable financial results, saw a considerable jump. Its share price soared 25% between 23 and 28 February, even though the Bern-based group, which is restructuring, is still in the red. Last year, the company's revenue was down 50%, while net losses increased from 64.5 million Swiss francs in 2020 to 100.5 million Swiss francs. But Meyer Burger may be able to get back in the black: "With the Ukrainian crisis, the solar industry is considered a strategic necessity to significantly reduce dependence on fossil fuels. The sector benefits from growing support from the European Union and the United States (...)," wrote the company in its annual report. "As a result, Meyer Burger benefits from a strong tailwind."

FOUNDED
1953

HEADQUARTERS
GWATT (BE)

EMPLOYEES
800

2021 REVENUE
CHF 39.9 M

MBTN

INTERVIEW

Vetropack, a factory under siege

The Ukrainian site of the Swiss glass packaging manufacturer has been heavily damaged in the war. Johann Reiter, CEO of the group, granted us an interview.

BY LUDOVIC CHAPPEX

Gostomel. Just months ago, very few people knew of this city, home to 18,000 residents located in Kiev Oblast. And then war broke out. This geostrategic access point near the capital – also home to a military base – was one of the first targets when Russian forces invaded Ukraine on 24 February. The level of destruction was extreme. Among the affected sites was a factory owned by Vetropack, a company that manufactures glass packaging for food and beverages. Production will not be restarting any time soon. Luckily, the Swiss company shut down its factory within the first few hours of the conflict.

And yet, Vetropack might still have to deal with the war. The company, founded in 1911, also has a production site in Chişinău, the capital of the Republic of Moldova, with 500 employees. Within western Moldova is Transnistria, a pro-Russian separatist territory. In the event that the situation worsens in the region, Vetropack is ready to suspend production. CEO Johann Reiter explains.

How has the situation at your Gostomel site in Ukraine evolved since the bombing on 24 February?

The factory is still closed. There is no change other than the fact that Russian troops have officially left the region. Since the start of the war, the most important thing for us has been to make sure our employees are safe. That's our top priority. Thank God we were able to evacuate the factory before the strikes and that no one was killed.

We're in daily contact with our management team in Ukraine, who keep us informed of the situation. We'll be able to start evaluating the exact scale of the damage to the factory, but we're just at the beginning of that process.

How do you think your business has been affected by the closure of the factory?

Production at the Gostomel site makes up approximately 10% of our revenue. The majority goes to the Ukrainian market, and the rest to other European countries.

Do you have an insurance policy that covers this damage?

No, unfortunately not. There is no insurance policy that covers damage caused by bombing during wartime.



"Unfortunately, there is no insurance policy that covers damage caused by bombing during wartime"

Could the Swiss government support the company financially, given the extraordinary nature of the situation? In the eurozone, there is talk of giving aid to the worst-affected companies.

We're doing everything we can on that front. But it's too early to talk about yet.

The factory that the Vetropack Group operates on the outskirts of Kiev, pictured here before the Russian invasion, was heavily damaged by bombing.



VETROPACK

FOUNDED
1911HEADQUARTERS
SAINT-PREX (VD)EMPLOYEES
3,9002021 REVENUE
CHF 816.5 M

VETN

You also have a factory in Moldova. Is Russia's retreat from western Ukraine reassuring?

We don't think there's a huge risk right now. Our Moldova factory continues production at maximum capacity. But the situation can change very quickly, as we've seen since the start of this crisis. We're prepared for any possibility.

How are you handling increased energy costs, which strongly impact your industry?

Indeed, energy costs are a determining factor in our industry, but that's also the case for the steel and

aluminium sectors, for example. The price increases are not solely due to the war, because prices had already started rising last year. We're explaining this to our clients as best we can. As a result, we've changed our business model: our prices are no longer set annually, but now quarterly or monthly, based on the changes in energy costs.

For all of these reasons, several financial analysts have significantly lowered their price target for Vetropack. What are your thoughts on this?

I would like to let analysts and our

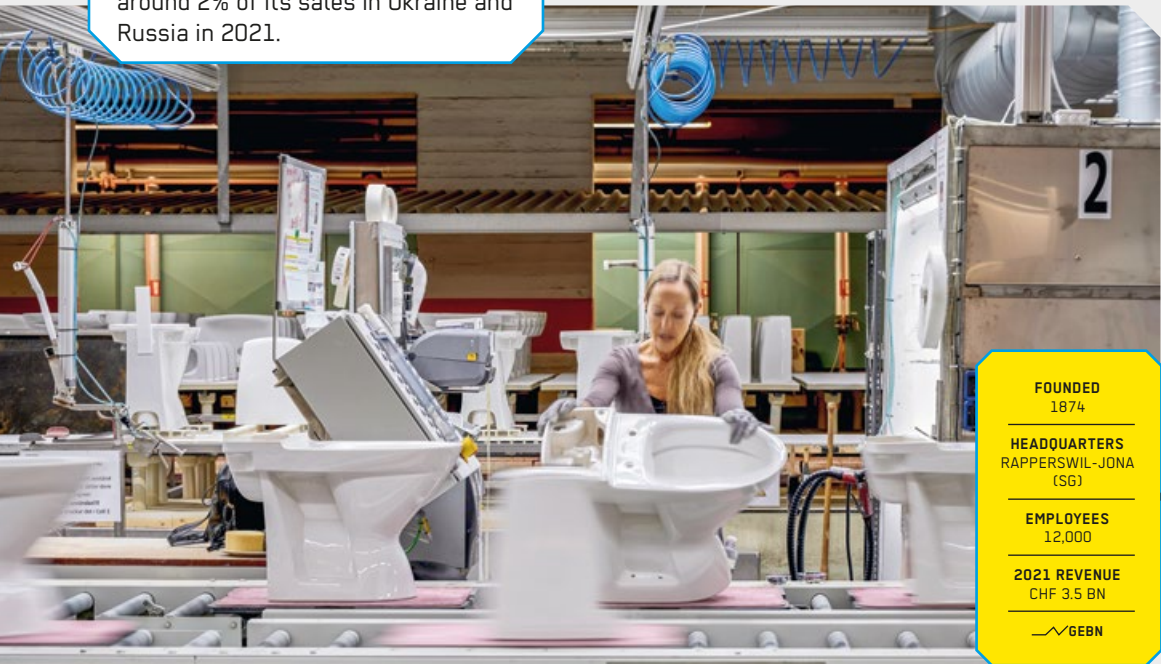
shareholders know that we have been active in our industry for more than 110 years and our balance sheets are solid, and that, in addition, the medium- and long-term projections for the glass packaging market are very promising. It's the environmentally-friendly packaging of the future. Moreover, 55% of our raw material is made of recycled used glass. We are fully focused on the future of the group, as evidenced by the ongoing construction of a new production site in Italy, in Boffalora sopra Ticino, near Milan. This factory will be at the cutting edge of sustainable development and the circular economy.

Geberit

Flushed out

The global leader in bathroom installations and systems has halted production at its Ukraine factory.

In a short four-line press release, the plumbing and bathroom accessories specialist Geberit announced on 25 March that it has suspended its activities in Russia, without mentioning the reasons behind its decision. The company has 70 employees in the country, who will continue to be paid. The group also has a ceramics factory in Ukraine in Slavuta, approximately 300 km to the west of Kiev, with 550 employees. Due to the conflict, production has been stopped since late February. Geberit also employs approximately 40 people in its representative office in Kiev. In total, the company generated around 2% of its sales in Ukraine and Russia in 2021.



GEBERIT

FOUNDED
1874

HEADQUARTERS
RAPPERSWIL-JONA
(SG)

EMPLOYEES
12,000

2021 REVENUE
CHF 3.5 BN

— GEBN

A Geberit factory in Bromölla, Sweden. The sanitary specialist has suspended its activities in Russia.

Burckhardt

A rare gas

The compressor specialist benefits from the increased use of liquefied gas in Europe.

On 14 March, Burckhardt Compression announced that, with immediate effect, it would stop sales in Russia, which generate between 2% and 2.5% of its revenue. However, “the change means opportunity for us,” said the CEO of Burckhardt Compression, Marcel Pawlicek, in an interview with *Finanz und Wirtschaft*. Indeed, since Europe decided to reduce its dependence on Russian natural gas, it has turned to American liquefied natural gas (LNG). And that is where Burckhardt Compression comes in: the company’s piston compressors are used to first liquefy the gas, and then to return it to a gaseous state. After doubling deliveries in recent months, the United States has promised to supply an additional 15 billion cubic meters of LNG to Europe in 2022, which would increase demand for Burckhardt’s piston compressors. Furthermore, the Swiss group also benefits from the rise in green hydrogen, since hydrogen production also requires the use of compressors.

FOUNDED
1844

HEADQUARTERS
WINTERTHUR (ZH)

EMPLOYEES
2,500

2021 REVENUE
CHF 658.6 M

— BCHN



Demonstrators holding a sign against the agribusiness giant, during a demonstration in support of Ukraine on 19 March in Bern.

FABRICE COFFRINI / AFP

Nestlé

A powerful hashtag

Under pressure from social media, the food giant had to reduce its range of products sold in Russia.

Like other food giants, including Danone and Burger King, the Vevey-based multinational was first reluctant to react to the invasion of Ukraine, only pulling its adverts and investments in Russia, as well as stopping exports of certain products, such as Nespresso capsules. These actions were not enough for Volodymyr Zelensky, who had an irate reaction: “Good food. Good life. This is the slogan of Nestlé. Your company that refuses to leave Russia,” said the Ukrainian president on 20 March, in a video addressing Swiss citizens. “Business works in

Russia even though our children are dying and our cities are being destroyed.” On social media, the hashtag #boycottnestle spread quickly thanks to hijacked marketing images, such as the brand logo stained with blood or replaced by the Z symbol used by Russian troops participating in the invasion.

To calm the chaos, Nestlé broke its silence via a press release published on 23 March, clarifying its position. “As the war rages in Ukraine, our activities in Russia will focus on providing essential food, such as infant food and medical/hospital nutrition – not on making a profit,” said the multinational. “This approach is in line with our purpose and values. It upholds the principle of ensuring the basic right to food.” Nestlé stated

that it has stopped sales of other iconic brands, such as KitKat and Nesquik, in Russia.

In total, the Swiss multinational employs more than 7,000 employees in Russia and has six factories there, including one located in Perm (which mainly produces KitKats), another in Samara (processing cocoa beans), and another in Timashevsk (Nescafé). Last year, Nestlé generated 1.7 billion Swiss francs in sales in Russia, or less than 2% of its revenue, which is 87.1 billion Swiss francs. The group also has three locations in Ukraine specialising in producing prepared food, confectionery and drinks, with 5,800 employees.

FOUNDED
1866

HEADQUARTERS
VEVEY (VD)

EMPLOYEES
273,000

2021 REVENUE
CHF 87.1 BN

— NESN

Holcim

A resistant cement manufacturer

The global leader in cement production must deal with rising energy costs.

At the end of March, the world's number one cement company finally announced that it was "starting the process of withdrawing from the Russian market", where it operates three cement factories, as well as three quarries, and has more than 1,000 employees. A change of course for the Zug-based giant which gave assurances a few weeks earlier that it wanted to maintain its activities in the largest country in the world where the company has invested more than a billion francs over the past 10 years. While Holcim's direct exposure to Russia and Ukraine is only 1% of sales, the company does face rising energy and raw materials costs, since producing cement uses a lot of energy. Even as early as 2021, construction materials manufacturers experienced energy inflation between 24% and 35% according to data from Morningstar. Thus far, Holcim has been able to maintain its profit margin, thanks to the implementation of higher prices. In fact, thanks to the construction boom, global demand remains high, allowing cement producers to pass on 100% of inflation costs in their prices. In the long run, the winners will be companies that develop new green cement that uses less energy, such as the concrete EvopactZero, launched by Holcim in 2020 and Futurcem, developed by Italian company Cementir.

FOUNDED
1912

HEADQUARTERS
ZUG (ZG)

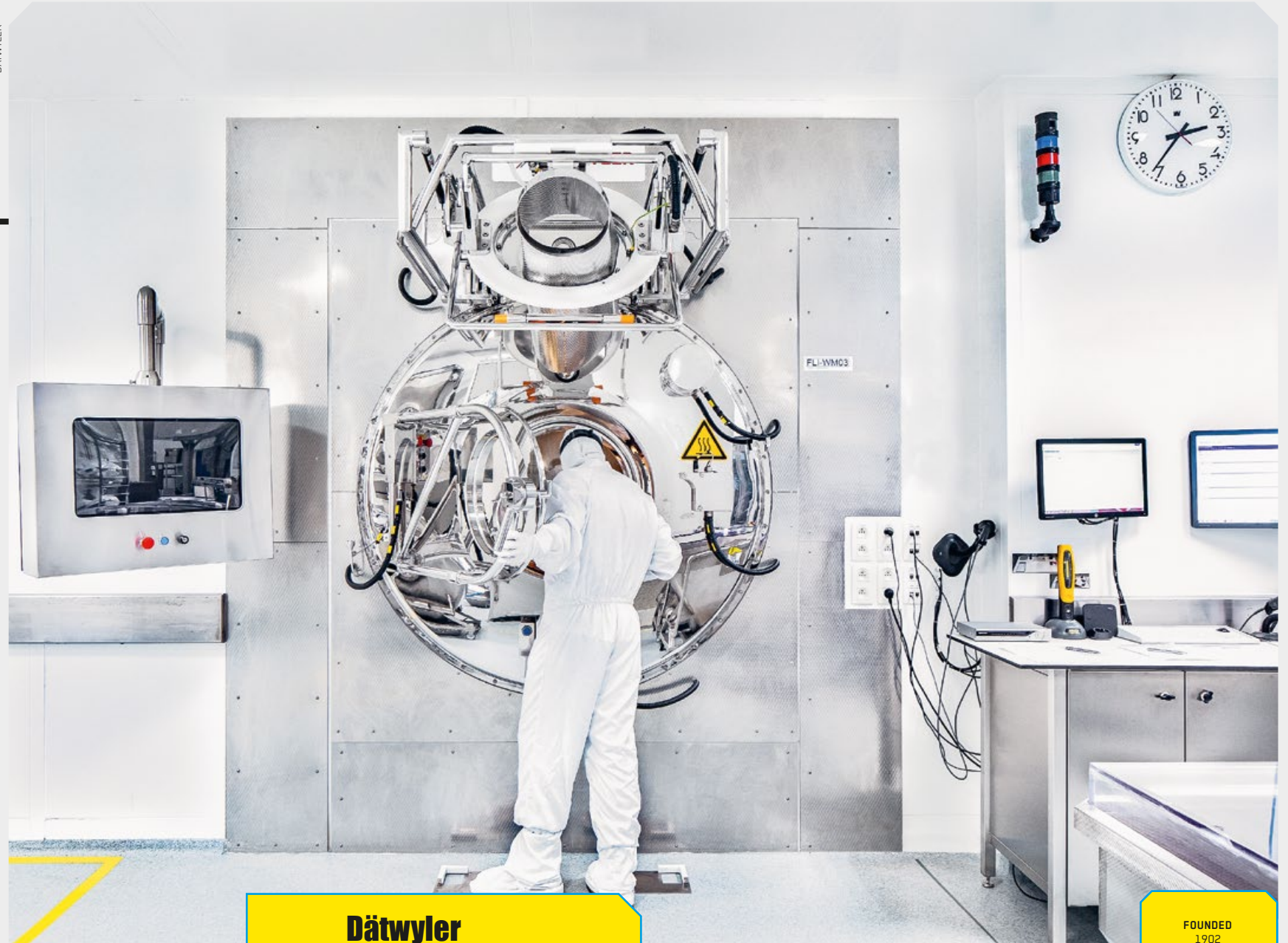
EMPLOYEES
70,000

2021 REVENUE
CHF 26.8 BN

HOLN

DÄTWYLER

The industrial conglomerate has a site in Ukraine. Here, an elastomer production plant for the company's pharmaceutical industry.



Swatch

A stopped watch

The luxury industry had to distance itself from Russia, a market that represents 1% to 2% of its revenue for this industry.

The Biel/Bienne-based watchmaker, which owns 17 brands including Breguet and Blancpain, halted all its exports to Russia. While the group

– which is discreet by nature – did not publish any figures regarding the impact of this decision on its revenue, UBS Bank estimates that Swatch generates 2%-3% of its sales in Russia. Swatch is not alone: since the start of the war, most luxury brands have left the country of tsars, including Geneva-based group Richemont and French brands LVMH, Kering and Hermès. While Russia could appear

to be a country partial to luxury, in reality it is only a small part of the industry's revenue: barely 1%-2% according to experts. Russia is far behind China, the primary driver of this industry.

FOUNDED
1983

HEADQUARTERS
BIEL/BIENNE (BE)

EMPLOYEES
36,000

2021 REVENUE
CHF 7.313 BN

UHR

Dätwyler

Stopped production

The elastomer components specialist has halted production at its Ukrainian factory.

Known for the production of Nespresso capsules, the Uri-based group Dätwyler produces elastomer components for the automotive, food and health industries, such as waterproof systems for pre-filled syringes or closures for vials of medicine. The company has a factory in Malyn, in north-western Ukraine, which produces parts for Dätwyler's industrial clients. The site, which has approximately 100 employees, has been closed since 24 February. It generates nearly 1% of Dätwyler's revenue.

FOUNDED
1902

HEADQUARTERS
ALTDORF (UR)

EMPLOYEES
6,900

2021 REVENUE
CHF 1.1 BN

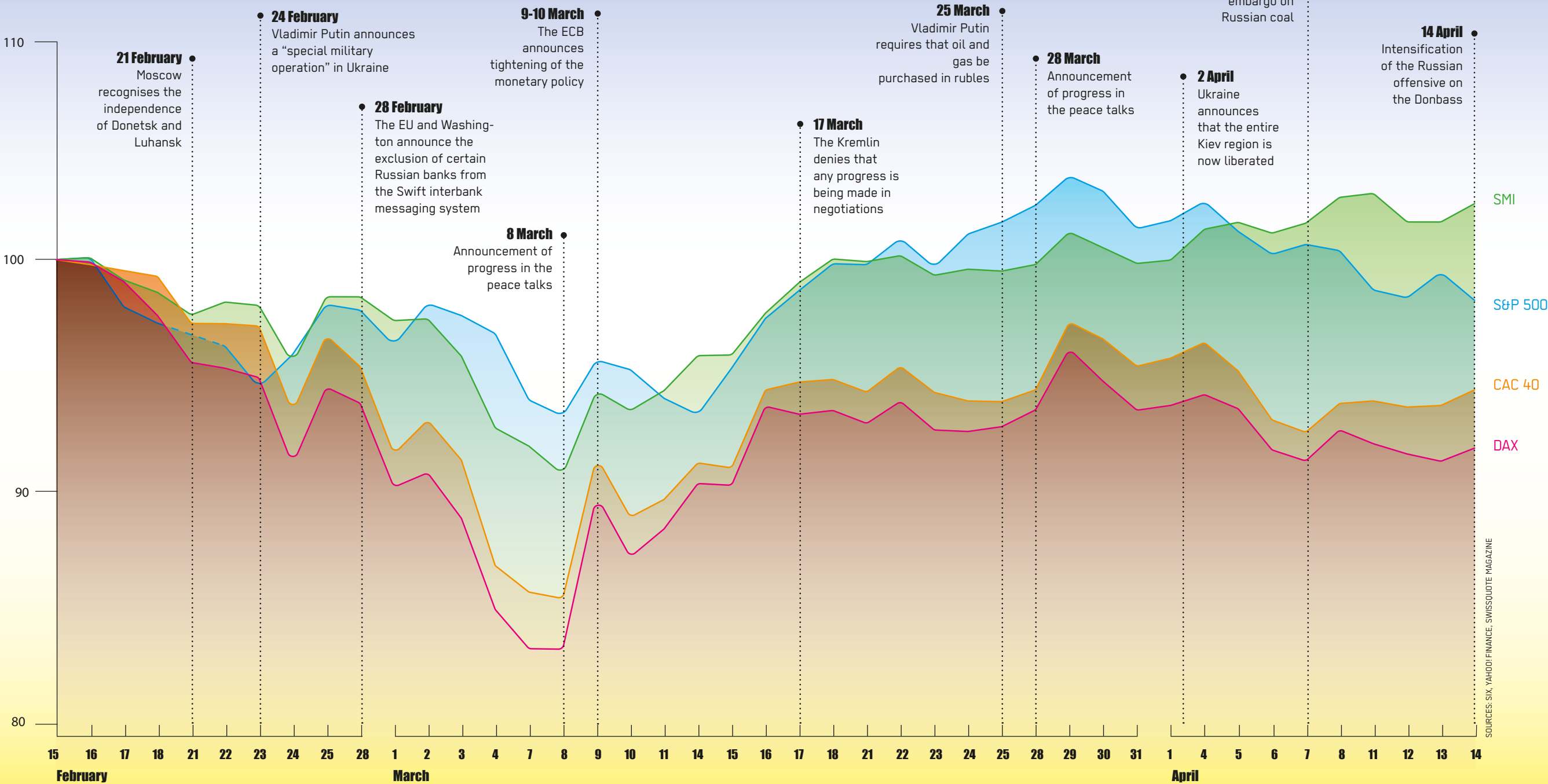
DAE

The brazen resilience of the markets

One month after the start of the conflict, the main stock indices have already returned to their pre-war levels.

BY BERTRAND BEAUTÉ

MARKET FLUCTUATIONS FROM 15 FEBRUARY TO 15 APRIL
Figures standardised to 100



SMI: flagship index of the Swiss Stock Exchange, it includes the 20 largest Swiss capitalisations.

S&P 500: index that includes the 500 largest companies listed on the stock exchanges in the United States.

CAC 40: main index of the Paris Stock Exchange, it has the 40 largest capitalizations in France.

DAX: main German stock market index, it includes the 40 most important companies of the Frankfurt Stock Exchange.

A brutal come-down expected for Europe

The war in Ukraine will have lasting effects on the global economy – how extensive those effects will be is currently unknown. While markets have returned to their pre-crisis levels, the shadow of stagflation weighs heavily on Europe.

BY BERTRAND BEAUTÉ

The war has turned the markets both hot and cold. “Since the start of the conflict, markets have forgotten the fundamentals a bit,” says Mabrouk Chetouane, head of Global Market Strategy at Natixis Investment Managers. “They react to current events, following good and bad news, rather than tangible economic outlooks.”

On 8 March, when peace talks were announced between Russia and Ukraine, the STOXX Europe 600 increased nearly 5% in one day. A few days earlier on 3 March, that same index, which is made up of the 600 largest European capitalisations, was down by 3.5%. Why? After a conversation with Russian president Vladimir Putin, French president

Emmanuel Macron said the following: “The worst is yet to come,” feeding the flame of chaos that has been disrupting the markets since the start of the invasion on 24 February.

“We’re going to see even higher levels of inflation”

Alan Mudie, chief investment officer at Woodman Asset Management

As a sign of this anxiety, the European volatility index VSTOXX – dubbed the fear index – reached nearly 60 points on 7 March, by far its highest

level since March 2020, and then fell below 30 points by late March – its pre-crisis level. “Uncertainty about the war led to a certain nervousness from investors at the start of the conflict. But the situation is beginning to normalise,” said Chetouane. “Markets adjust to everything. They adjusted to Brexit, to the China-US trade war, to COVID, to the annexation of Crimea... They will adjust to this crisis as well.”

Indeed, as of the end of March, most European indices had already recovered their losses since 24 February – the day Russia invaded Ukraine (see infographic on p. 48). “Investors, who initially feared a breakdown in the Russian gas supply, escalating conflict in Europe, or even the outbreak of a Third World War, were somewhat

reassured,” says Hubert Lemoine, chief investment officer at Schelcher Prince Gestion. “They accepted the idea of a long conflict that remains limited to Ukraine, with a diplomatic agreement in the more or less long term.”

But this market optimism seems to be at odds with the economic reality, particularly in Europe, which is on the front lines of this conflict due to its dependence on Russia for energy. “Before the war, inflation was already a threat. The invasion of Ukraine made the situation worse,” said Chetouane. “According to our projections, inflation is expected to reach 5% in 2022 in the Eurozone and 2.9% in 2023. These are unprecedented levels.” According to Eurostat, the annual inflation rate in the Eurozone

was 7.5% in March, after a 5.9% increase in February. This is the highest level since the indicator was first produced in 1997.

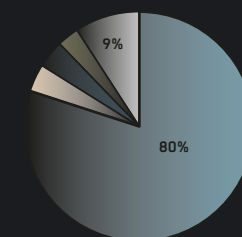
This is due to the fact that the price of raw materials, energy and food-stuffs has increased since the start

of the conflict (see p. 54). “We’re going to see even higher levels of inflation,” warned Alan Mudie, Chief Investment Officer at Woodman Asset Management. “We need to keep in mind that this geopolitical crisis is here to stay. Europe wants to massively reduce its imports of Russian ▶

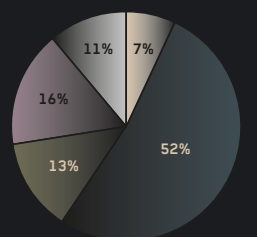
Located about 40 km northwest of Kiev, Borodyanka, a city of 13,000 inhabitants, was massively bombed by the Russian army.

TRADE BETWEEN SWITZERLAND AND RUSSIA

- Precious metals
- Agriculture
- Pharmaceutical and chemical industries
- Electronics
- Watches, jewellery
- Other



Imports / CHF 3.4 BN



Exports / CHF 1.4 BN

Sources: Office fédéral des douanes, RTS



GETTY IMAGES

While the Nord Stream 2 construction site was completed at the end of 2021, German authorities suspended the authorization for the commissioning of this gas pipeline linking Russia to Germany at the end of February.

energy, but that will take time: 40% of natural gas consumed in the European Union comes from Russia, so a quick pivot is not possible! Energy prices could be high for a long time.”

Mabrouk Chetouane agrees, saying “the height of inflation is still to come and should arrive in Q3.” According to economists at Goldman Sachs, inflation will reach a maximum of 7.7% in July in the Eurozone.

Faced with increased consumption prices, households may slow their spending and companies could limit their investments. This would all lead to limited economic growth. In this context, the IMF has revised its 2022 growth outlooks for the eurozone to 2.8% from 3.9% in its January forecast. But Bank of America already predicted that European GDP growth

would be no more than 2.4%. In relation to Switzerland, the economic institute KOF expects a 2.9% increase in GDP in 2022.

Adapting supply chains is a process that everyone must undergo

These estimates could be revised downwards even further over the course of the year. “Economists don’t want to announce outlooks that are too dire, too soon, so as to not scare off investors,” said Lemoine. “In reality, the risk of stagflation in Europe – a period where high inflation coexists

with stagnant economic growth – as we saw with the first oil crises in 1973 and 1979, is high. And if we’re not yet in a recession, we’re not far off. There are concerns that the economy could come to a screeching halt.”

Christine Lagarde also said something along those lines: “The longer the war lasts, the higher the economic costs will be and the greater the likelihood we end up in more adverse scenarios,” said the ECB President on 30 March. The risk is even higher given that inflation isn’t the only issue brought on by the war.

To receive their supply of raw materials, manufacturers must learn to bypass Russia. This is especially challenging given that Moscow is a significant supplier of minerals for Europe (see infographic on p. 54). For example,

of the titanium used in their aircraft, Airbus and Boeing import 50% and 30% respectively from Russia. After breaking their contract with Russian giant VSMPO-Avisma, the global leader in titanium production, the two aviation companies need to find other suppliers. In another industry, Geneva-based firm Richemont, which owns the jewellery house Cartier, among others, has stopped using Russia for its diamond supply. Again, it must find an alternative, considering that the Russian mining company Alrosa holds 28% of global market share. Adapting supply chains is a process that “everyone must undergo,” said Cyrille Vigneron, president and CEO of Cartier, at a watchmaking conference in late March. “That comes at a price that we don’t know yet.”

Other Western companies had to flee the Russian market post haste, mostly due to pressure from consumers, even though they generated a substantial portion of their revenue in the country, including automotive manufacturer Renault. Russia made up 18% of Renault’s sales and 12% of its operating margin. Of course, this is an extreme case. Most European manufacturers are not very exposed to Russian and Ukrainian markets, which only represent at most a few percentage points of their revenue.

Swiss exports to Moscow, for example, were only worth 3.4 billion Swiss francs in 2021, or less than 1% of the total. “But the Swiss economy is a global economy, strongly linked to the rest of the world,” said Eleanor Taylor Jolidon, co-head of Swiss and global assets at Union Bancaire Privée (UBP). “Sluggish global growth will have negative consequences for Swiss companies.”

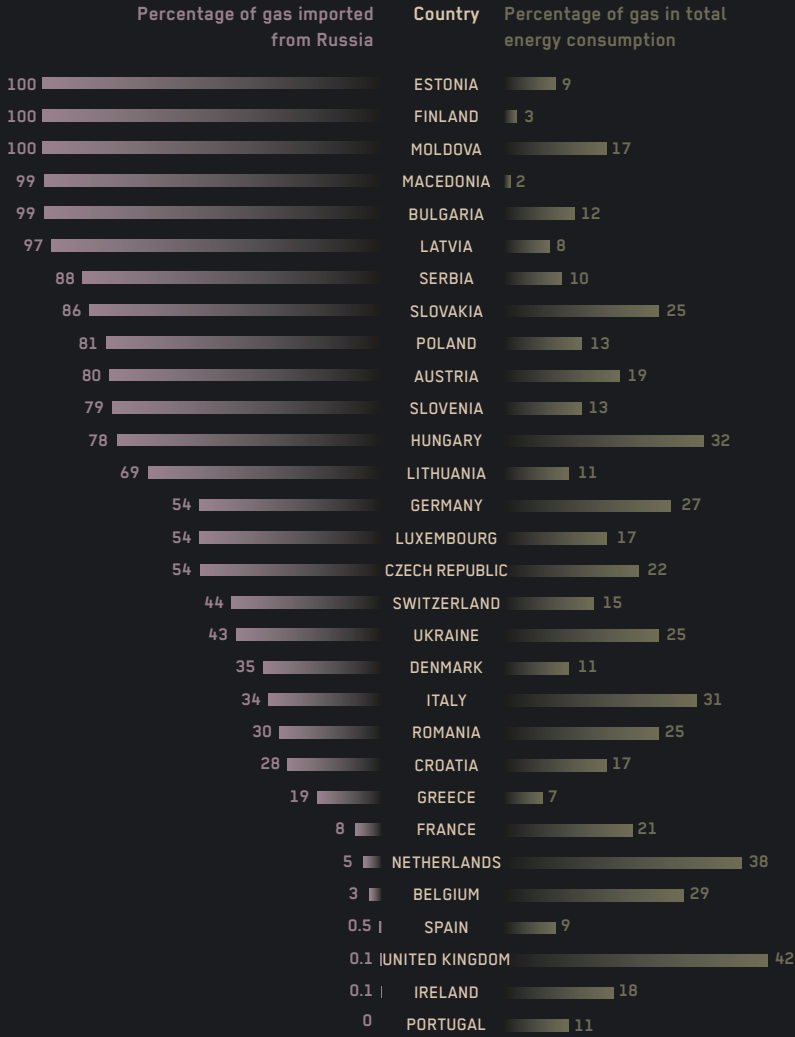
This is because, apart from its direct consequences, all economic players will feel the side effects of the war, including inflation, as well as supply-chain disruptions. For example, Ukraine produces 70% of the world’s

neon, an essential gas used to manufacture semi-conductors. This could lead to shortages. In a note published on 22 March, Allianz Research believes that “the indirect impacts of the war will be global, massive and immediate. The entire global economy will suffer from rising energy and raw materials prices, as well as additional supply chain problems.”

According to a study published on 16 March by Swiss corporate union Economiesuisse, nearly one-third of all Swiss companies believe that the war has already caused supply chain

issues and 50% believe that the war will have an impact on revenue. Some of the materials that are hard to come by include aluminium and wood, as well as production equipment, machines and semi-conductors. Most companies that we profiled in this issue confirmed that they are currently unable to put a cost on the financial impact of the war (see company profiles on p. 32 to 47). “When public companies publish their Q1 and especially Q2 results, investors will find out which companies have been most affected by the crisis,” Hubert Lemoine notes. ▴

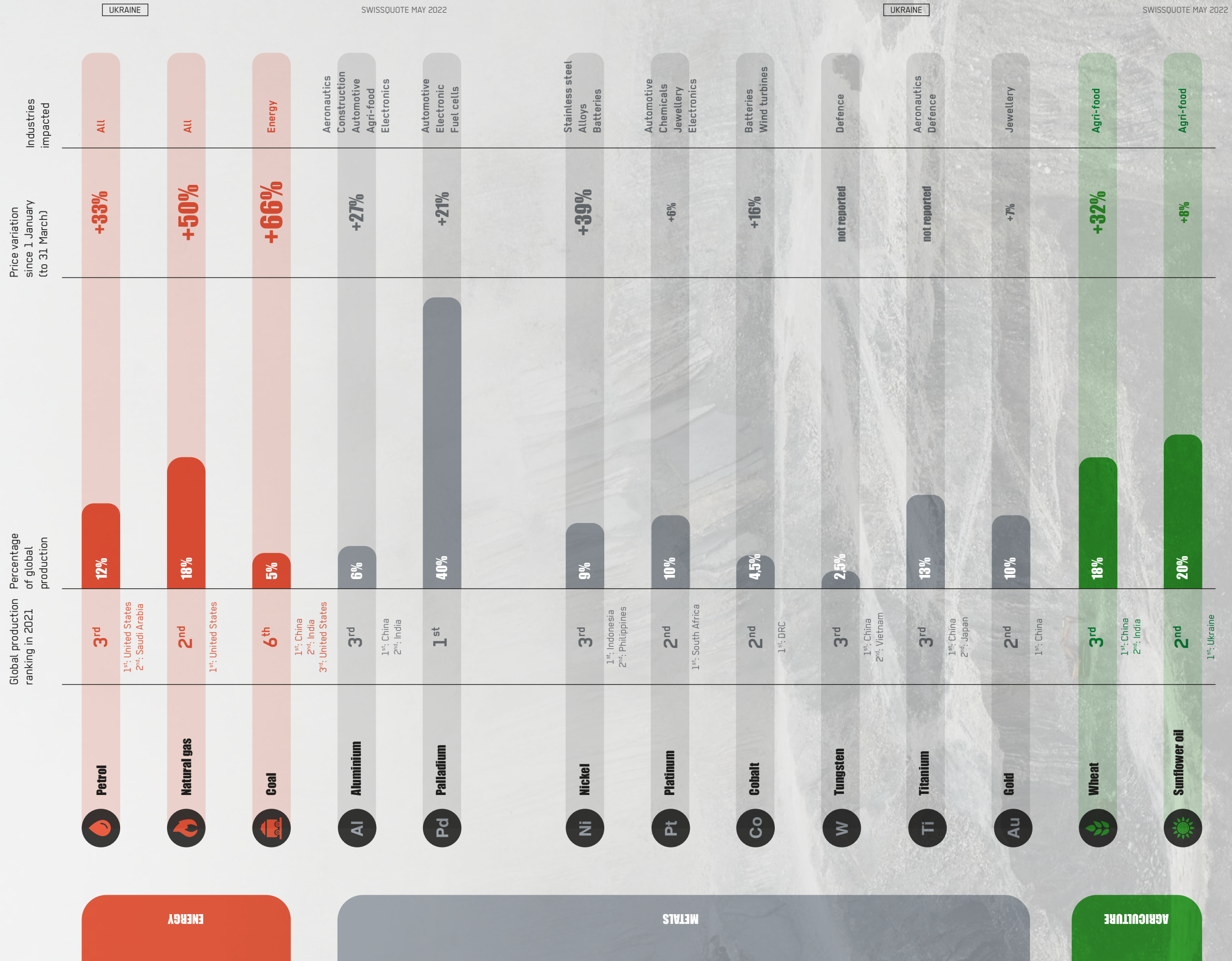
EUROPE USES LOTS OF RUSSIAN GAS



Source: Bruegel

Russia: a raw materials giant

With an immense geographical area, Moscow holds mining resources that are vital for the global economy.



The energy transition accelerates

The supply of raw materials in Europe is going to radically change. Explanations from Clive Burstow, a mining industry specialist at Barings

BY BERTRAND BEAUTÉ

One of the most concerning consequences of the war in Ukraine is that since Russia produces many raw materials, the price of those materials is rising dramatically, worsening what is already record inflation. And this situation will continue, according to Clive Burstow, head of Global Resources at the US investment firm Barings.

The war has led to a rise in energy prices. Will oil and gas remain expensive in the long term?

Yes. Don't forget that energy prices were already rising before the war – oil, for example, was up more than 40% in 2021. Why? After the pandemic, the economic recovery strongly stimulated demand while, on the supply side, the sector suffered from chronic underinvestment. In other words, production struggled to meet demand, as it took time to increase volume. And then the war in Ukraine happened, adding to this already delicate situation. The tragedy demonstrated just how fragile our energy supply is, not just in Europe but all over the world.

Could improving relations with Iran and Venezuela – two oil-producing countries that are under embargoes – help to rebalance supply and demand?

Everyone's talking about these two countries in the current context, but even if the embargoes were lifted, the situation would still be complicated. Venezuela is not able to increase its oil production due to a lack of investment in its infrastructure. It would take years for the country to reach a significant level of production. Iran, on the other hand, has maintained its production capacities and its oil can be used. The problem here is geopolitical. How will Saudi Arabia react if Iran increases production? What will happen if Iran starts trading with Russia?

On 7 April, the European Union announced an embargo on Russian coal starting in August. How do you interpret that sanction, given that it doesn't apply to oil and gas?

The EU's response to the invasion is a tactical short-term change, but it is part of a longer-term structural

change. Before the war, we were already trying to distance ourselves from a system that was heavily dependent on fossil fuels and move towards renewable energies. But that takes time. When war broke out, everything changed: European countries decided to work together to accelerate their energy transition. Even if the EU cannot immediately move away from Russian oil and gas, it will do so gradually. The next 10 years will be fascinating because we're going to see a phenomenal acceleration in the process of energy transition. The war in Ukraine is a deciding factor in that.

But this transition requires metals, including those of which Russia is a major supplier...

Indeed, for the same amount of energy produced, an offshore wind farm requires, for example, an average of

“The tragedy demonstrated just how fragile our energy supply is”

five times more steel than an onshore fossil fuel electric power plant. And Russia produces many metals such as aluminium, palladium and nickel. Russian palladium, for example, is necessary to reduce CO₂ emissions in the automotive sector. The conflict will lead to a global reorganization of supply sectors. Each country will try to secure their own sources of metal.

The EU is studying this issue very closely. It has drawn up a list of critical materials for which it wants to become less dependent on non-EU countries, either by increasing reserves or ensuring its own production. But for the time being, the EU does not have mining capacities to

reach this objective.

It is possible to save or recycle metals to fill the gap, but it will not be enough. And even on a global level, metal production remains insufficient to enable energy transition. The reality is that metals need to reach even higher prices in order to encourage an increase in global mining capacities.

So are mining companies considered good investments?

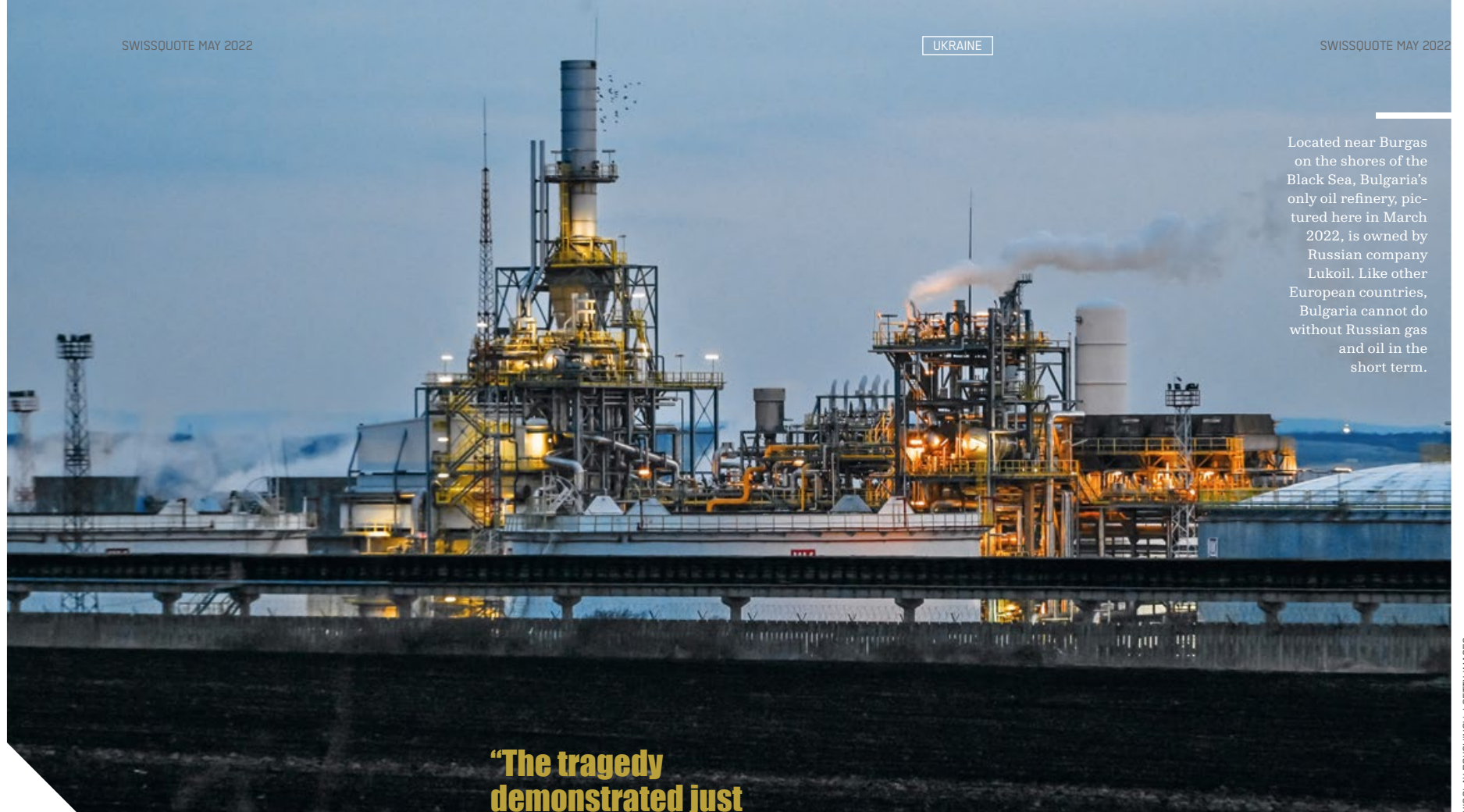
Large producers such as Australia's BHP and the UK's Anglo American will benefit from the energy transition. What's interesting is that the mining industry was poorly viewed for a long time from an ESG perspective because it's a high-carbon industry. But now, investors are starting to realise that the natural resources sector is part of the solution rather than the problem when facing

climate change – because without mines and metals, it's impossible to build wind turbines or solar panels to replace fossil fuels.

According to the UN Food and Agriculture Organization (FAO), global food prices reached their highest levels in March, as a result of increased grain prices due to the war. Will prices remain high?

People certainly need to eat and food needs to remain affordable. It's a political imperative for governments to ensure that food price inflation remains under control. The agri-food industry is doing everything it can to improve its yields and change its supply systems to deal with the crisis in Ukraine. However, it is not certain that these measures are enough to bring down food prices in the short term. ▴

Located near Burgas on the shores of the Black Sea, Bulgaria's only oil refinery, pictured here in March 2022, is owned by Russian company Lukoil. Like other European countries, Bulgaria cannot do without Russian gas and oil in the short term.



NICOLAY DOYCHINOV / GETTY IMAGES

Chinese stock markets ready to rebound?

After being battered for months, Chinese stocks are once again beckoning investors. But the resurging COVID epidemic in Asia could spoil the fun.

BY BERTRAND BEAUTÉ

“China could be the big stock market winner in 2022.” Hubert Lemoine, chief investment officer at Schelcher Prince Gestion, believes the time has come to look at Chinese stocks in a fresh, new light. “Stocks have fallen sharply since 2021, and we now expect a rebound,” the expert says. BNP Wealth Management agrees, “We see very good re-rating opportunities in Chinese equities and selected China credit over the course of the year,” the French bank wrote in an article published on 21 March.

But it must be said, Chinese stocks are at their lowest. The CSI 300 index, which includes the 300 largest capitalisations on the Shanghai and Shenzhen stock exchanges, plummeted more than 13% over the first three months of 2022. That dive is steeper than that of the world’s biggest markets, themselves strained by the Russian invasion of Ukraine. The blow comes even harder as 2021 was already a difficult year, with a 5% drop registered in the CSI 300. For

example, the share of e-commerce giant Alibaba has lost more than 50% of its value in the past year (as at 31 March).

The share of e-commerce giant Alibaba has lost more than 50% of its value in the past year

To cope with that, Beijing has decided to take matters into its own hands. In mid-March, the government announced that it would usher in “market-friendly policies” to support the economy. “The Chinese central bank has much more room for manoeuvre than its Western counterparts since it hasn’t, until now, adopted any drastic measures to counter the effects of the pandemic,” says Hubert Lemoine.

The CSI 300 index immediately jumped 4.3% on the back of these statements. Flash in the pan or sustainable recovery? Opinions differ. “The government’s announcements were welcome news that investors were happy to hear,” says Alan Mudie, chief investment officer at Woodman Asset Management. “But concerns linger about Chinese growth.” Swiss private bank Lombard Odier, for example, forecasts 4.7% growth in 2022. That comes under the 5.5% target set by the Chinese authorities, which is already well below China’s 8.1% growth in 2021.

Three dangers could jeopardise the recovery. The first is the most worrisome. While Western countries have relaxed all their measures

to combat the coronavirus, Beijing clings to its zero-COVID strategy. The result is repeated lockdowns and factory closures, all while the number of cases rises. For example on Sunday, 27 March, Beijing began another lockdown in Shanghai, one of the world’s largest cargo ports. “We’re still not sure of COVID’s

impact on China’s economic growth, so investors remain cautious,” Hubert Lemoine says.

Secondly, a potential property crisis still looms large. On 21 March, the beleaguered Chinese property giant Evergrande once again suspended trading on the Hong Kong markets, raising fears that the property boom could go bust. “The government will take timely, forceful and effective measures to prevent and resolve risks in the property sector,” BNP Paribas reassures us.

A final pitfall: “Chinese markets have become much less attractive to foreign investors since Beijing decided two years ago to take control of the tech giants, and to end activities deemed undesirable such as online education”, Alan Mudie points out. However, the government seems to have realised the damage that its harsh reforms have sometimes caused to investors, indicating that from now on “any policy having an impact on the financial markets will first have to be coordinated with financial regulators”. Despite this announcement, “Regulation uncertainty persists,” BNP Paribas said.

AMBIVALENCE TOWARDS MOSCOW

Then there is the current geopolitical situation. Since the start of the conflict between Ukraine and Russia, China has been treading a delicate balance, refraining from condemning Moscow while tempering its relations with the West. Some experts feel that its ambivalent stance was to make Beijing “the big winner” of the war. But the “special military operation” in Ukraine has not produced the desired effects. The US warned Beijing at the outset of the conflict about the consequences of supporting Moscow.

“I don’t believe much in Beijing’s unconditional support for Moscow. China is far too deeply embedded in the global economy to risk international sanctions,” Alan Mudie says. “Its policy is built around continuing to lift its population’s standard of living, which requires buoyant international trade.” Beijing’s calculation is simple. China exported about \$68 billion worth of goods to Russia last year, while its exports to the United States and EU are well over \$1 trillion, as estimated by Hong Kong-based financial research firm Gavekal. In other words, China has a lot to lose economically by cutting itself off from its Western customers. And for Beijing, a de-escalation of geopolitical tensions together with an end to the pandemic would be the best news for fuelling its growth. ▴



The rise of small nuclear reactors

The power module containing the mini-reactor from American company NuScale. This cylinder, only 23 m high, with a diameter of 4.50 m, generates 77 MW of electricity. In comparison, a wind turbine generates between 1 and 3 MW.

Easier to finance and build than their gigantic predecessors, mini nuclear reactors are a ray of hope for the industry. We take a closer look...

BY JULIE ZAUGG

When you think of a nuclear reactor, you generally imagine a massive project that took a decade to build and cost several tens of billions of francs. But a new generation of mini reactors, called Small Modular Reactors (SMRs), hopes to revolutionise the industry. Equipped with compact reactors (16 m x 4 m on average), they can be placed on a surface the size of two football pitches, or one-tenth of the space occupied by a conventional reactor. Construction typically takes less than five years, and costs are between 1 and 2.5 billion Swiss francs, compared to the 24 to 26 billion expected for the massive power plant project at Hinkley Point in the UK.

“The quantity of energy that these mini reactors produce can be increased or decreased based on demand from the network”

Amjad Ghori, director of Agias Advisory

The sector is booming: the International Atomic Energy Agency (IAEA) identified 72 models of SMRs around the world currently in relatively advanced stages of development. Besides the already operational small reactor from Russia's Rosatom agency, the first prototypes are expected to be complete before the end of the decade. The market for these smaller models could be worth €250 to €400 billion (307 to 491 billion Swiss francs) by 2035, according to

Rolls-Royce, one of the companies active in this field. But other estimates are much more conservative. In a study published in December 2021, US firm Allied Market Research predicted that the SMR market would be worth \$18.8 billion (17.55 billion Swiss francs) in 2030. As for the OECD Nuclear Energy Agency, it believes that in the most favourable scenario, SMRs will generate 21 gigawatts (GW) of electricity in 2035, or 3% of global nuclear capacities, generating revenue in excess of \$100 billion.

While these smaller reactors only generate modest power – between 50 and 300 megawatts (MW) – compared to their larger predecessors such as French EPRs, which can exceed 1,600 MW, they do have many advantages: “Since the small reactors can be built faster, there are fewer financial risks associated with delays or excessive costs,” says Amjad Ghori, director of the consulting

firm Agias Advisory, which specialises in the nuclear industry. “Rolls-Royce will even build its reactors under a dome to avoid any weather interruptions, which cause 40% of delays in plant constructions in the UK.”

The mini reactors are also completely modular. “The components can be produced in a factory, then brought via lorry to the reactor location to assemble,” says Robin Grimes, professor of material physics at Imperial College London. “This results in significant economies of scale.”

This cost control makes it easier to finance the plants. “It's easier to convince investors to invest in a project that costs \$2 billion than a project that costs \$20 billion,” says Fiona Reilly, who led a group of experts set up by the United Kingdom to study the financing of mini nuclear reactors. “Consumers will also benefit from the lower initial operating costs, via reduced electricity bills.” ➤



GE Hitachi estimates that the cost per megawatt generated by its mini reactor will be 60% lower than a megawatt produced by a conventional nuclear plant.

For big nuclear plants, the construction process is usually an obstacle course, particularly due to the countless safety measures that need to be followed. Many projects that were started in the last decade hit setbacks and ended up in the red. The Vogtle project from Westinghouse Electric Company in Georgia, USA, saw costs rise from \$14 to \$28.5 billion. The plant is still not in service yet, even though it was due to be completed in 2017. A similar situation has arisen in France, where in January 2022 EDF announced delays to its EPR in Flamanville. Finland's Olkiluoto-3 EPR, located 270 km from Helsinki, has just become operational in mid-March after a 12-year delay. The cost was initially estimated at €3.4 billion but ended up being €11 billion.

In this context, deploying a fleet of small reactors seems like an

opportune solution, especially since most countries have made strong commitments to reduce their CO₂ emissions and their objectives cannot be reached with renewable energy alone. "The United Kingdom and Poland have planned to replace some of their gas- and coal-powered plants with small nuclear reactors," says Jeremy Rayner, an expert in the energy sector from the University of Saskatchewan in Canada.

This approach will allow the two countries to meet their environmental goals as well as increase their energy independence. The UK and Poland, much like their European neighbours, heavily depend on Russian gas, a liability that has become untenable given the recent events in Ukraine.

A complement to renewables

Experts also see the potential interest in small nuclear reactors as a complement to solar and wind energy. "The quantity of energy that these mini reactors produce can be increased or decreased based on

demand from the network, which isn't possible with big nuclear plants whose energy production needs to remain stable," says Ghorri of Agias Advisory. "Mini reactors can be useful as an additional energy source to fill in the gaps of renewable energies that are dependent on sun and wind."

Given their low output, SMRs also decentralise electricity production and can be used to directly supply an industrial site without having to use the electricity grid. "These mini reactors are extremely flexible," agrees Alistair Evans, government and corporate affairs director for Rolls-Royce's SMR project. "They can be used to produce hydrogen by electrolysis, to desalinate water, to provide additional support to industrial processes that use lots of energy, or to produce synthetic fuels for aviation."

The last key argument is that these mini reactors are less dangerous than conventional nuclear plants. "They operate at a lower temperature and concentrate less radio-

active material," says Rayner of the University of Saskatchewan. The most advanced SMRs, in which fuel is in liquid form dissolved in molten salt, are even safer. In the event of an explosion, the salt would solidify and remain in place rather than becoming a radioactive cloud.

NuScale Power, a company based in Portland, Oregon, is the clear front-runner according to experts

Currently, three companies are racing to develop the first mini nuclear reactor. NuScale Power, a company based in Portland, Oregon, is the clear front-runner according to experts (see inset). "Its model is the most advanced and has already obtained the necessary approvals in the United States," says Rayner. The electrical supplier for the state of Utah has committed to purchasing six mini reactors. The US company has

also signed contracts with Poland, Romania, Bulgaria, Kazakhstan and Ukraine. But Rolls-Royce and GE Hitachi aren't far behind. "We're planning for our first reactor to be operational in the early 2030s," says Evans of Rolls-Royce. "It will be capable of generating 470 MW of electricity, which would be enough for one million households." In time, the company plans to roll out up to 16 in the United Kingdom. It just received an investment of €490 million to carry out its project, with nearly half of those funds coming from the UK government.

GE Hitachi, a co-company created in 2007 in Wilmington, North Carolina, has signed a contract to deploy its mini reactors in Ontario, Canada. It has also agreed to supply around 10 reactors to Polish companies and signed a cooperation agreement with the Czech Republic's national electricity agency. French group EDF plans to start working on its first SMR build by around 2030.

A handful of companies, including US groups Westinghouse, TerraPower – a project financed by Bill Gates – Radiant and X-energy, have begun working on very small nuclear

ROLLS-ROYCE

PROFILES

NUSCALE POWER

The leader

The company from the University of Oregon was created to commercialise mini nuclear reactors. Currently its model is the most advanced. It is founded on tried and tested technology used in light water reactors, which will facilitate the construction and approval processes. However, it is slightly less modular than its competitors, which could result in extra costs. NuScale Power went public on the Nasdaq in late 2021 via a SPAC vehicle, which valued it at \$1.9 billion. Analysts see it as a risky investment, but one that could generate returns over several decades once the first reactor is operational.

FOUNDED: 2007
REGISTERED OFFICE: TIGARD, OREGON (US)
WORKFORCE: 150
REVENUE: NOT AVAILABLE

— SMR

ROLLS-ROYCE

The heavyweight

With more than 50 years of experience in building nuclear reactors, particularly those used to propel submarines, Rolls-Royce was an ideal candidate to develop a mini nuclear reactor. The UK group also benefits from significant support from the UK government, which is a safeguard against unexpected events. Its reactor model, which is notably very simple, can be built or assembled up to 90% at a factory, enabling considerable economies of scale. But it's a gamble on the future, according to analysts, who believe that the group won't start seeing results from the reactor until at least 2030.

FOUNDED: 1906
REGISTERED OFFICE: 50,000
WORKFORCE: LONDON
REVENUE: €11.2 BILLION

— RR

Futuristic image of a mini-power plant housing GE Hitachi's BWRX-300 mini-reactor.

GE HITACHI

reactors, a niche product designed for remote areas. Several models have already been built. Radiant's very small reactor is so compact that it can fit inside a shipping container.

"Their reactors generate approximately 30 MW of electricity, or one-thirtieth of the power of a conventional power plant," says Rayner. "This makes them particularly well adapted to isolated regions that do not have access to the electricity grid, such as certain indigenous communities and mining villages in Canada." They could also be used to power a data centre or a military base.

In Russia, China and Denmark, projects are even underway to develop floating nuclear power plants on barges. The Russian project from Rosatom was connected to the electrical grid in Pevek, an Arctic city, in late 2019. In a world seeking to divest from fossil fuels, nuclear energy is a powerful possibility. ▀

A change of scale with the Finnish EPR Olkiluoto-3, a "classic" nuclear reactor of the latest generation, which entered service in mid-March.



ANTTI YRJONEN / AFP

PROFITABILITY REMAINS TO BE SEEN

At the end of the 1970s, France – the most nuclearised country in the world – had already embarked on a mini reactor project. It was quickly abandoned, as experts at the time believed that it would never become profitable. What changed in 50 years? The answer is not as easy as small modular reactor (SMR) enthusiasts would like you to believe. Some back-of-the-envelope maths: to replace a 1,650 MW EPR, you would need about ten 170 MW mini reactors. At \$1.2 billion each, that comes to \$12 billion – which isn't far from the €13 billion that the Flamanville EPR cost.

The argument for economies of scale due to production in a factory is not enough to convince M.V. Ramana, a specialist in the nu-

clear industry at the University of British Columbia in Canada: "The price per unit of these mini reactors will only decrease if many are produced, and I doubt that demand is high enough to absorb that supply. Especially given that there are different models competing with each other, which will segment the market." He estimates that the cost per kilowatt-hour would be \$15,000 to \$20,000, compared to \$8,000 to \$10,000 for a conventional nuclear plant.

Furthermore, the growing SMR segment is still too dependent on generous government subsidies. In the US, the Department of Energy granted \$1.2 billion to this industry between 2011 and 2019, of which \$540 million was in direct grants. In France,

incumbent presidential candidate Emmanuel Macron announced in October 2021 an investment of €1 billion by 2030 in order to "create innovative small reactors in France".

These "made in France" models would be exported. This vision is in line with the predictions from the International Atomic Energy Agency (IAEA) in its 2021 report: "Low- and medium-powered reactors and modular small reactors are sparking significant growing interest, particularly for their ability to work in isolated areas or in countries with low-capacity energy grids. However, it is the advanced large reactors, which are cooled with water, that should make up the majority of new capacities over the next 30 years."

RADO

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CAPTAIN COOK HIGH-TECH CERAMIC DIVER

Feel it!

SWISS STARTUPS IN THIS EDITION

BY GRÉGOIRE NICOLET



GENLOTS

OPTIMISING SUPPLY CHAINS



Number of
employees
5

Founded
2017

While a student at EPFZ, Simon Schenker, co-founder of GenLots, realised that the software that companies used to plan their purchases (management software or ERP) had not changed in the last 30 years. With that in mind, Schenker developed a platform entirely focused on supply planning using a new cost calculation model as well as artificial intelligence, which creates optimal supply strategies on a case-by-case basis: "Better planning can reduce both incoming deliveries as well as stocks by 50% and 30% respectively – which has a positive impact on CO₂ emissions – and most importantly, we can make optimal use of the discounts negotiated by the purchasing departments," adds the other co-founder, Arnaud Alves de Souza. GenLots has raised a total of 1.5 million francs, particularly thanks to the Berlin-based Fly Ventures, and the European Commission granted it the Seal of Excellence in 2019, an award recognising ideas that are worth financing.

NEMIS TECHNOLOGIES

STALKING PATHOGENIC BACTERIA



Number of
employees
15

Founded
2018

Each year, the food industry conducts approximately 1.4 billion tests to detect pathogenic bacteria such as salmonella, listeria and E. coli. This is a gigantic market that the startup NEMIS is entering with its tests that are less expensive, easier to use and that deliver faster results. Its technology, which has already been certified by AOAC (the primary certification body in the industry), makes it possible to conduct tests directly on-site, without having to go to a laboratory.

But the pandemic slowed NEMIS in the Swiss market, as many food producers banned factory visits, which delayed pilot testing. But Arnaud Muller, CEO of NEMIS, is not discouraged: "Despite these unexpected challenges, we won 25 clients in 2021 and we're successfully expanding into five key European markets," says Muller. The 7.7 million Swiss francs raised in February (Series A) will allow the company to continue its international expansion.

9T LABS

CARBON INSTEAD OF METAL


The company 9T Labs has ranked in the top 100 Venturelabs startups since it was founded in 2018 (10th in 2019, sixth in 2020, third in 2021). The EPFZ spin-off specialises in designing and moulding carbon-fibre composite parts that are just as solid as steel or aluminium. "Our technology cuts production costs by half of what an identical part would cost, and also reduces the weight by up to 80%, a precious advantage for the aeronautics and automobile industries which are our main clients," says CEO Martin Eichenhofer.

9T Labs also develops and manufactures everything itself: 3D printers, presses for compression moulding, and programmes that can design extremely complex parts. This innovative boom has resulted in more than 35 patents and patent families filed. Thanks to the \$17 million raised during its Series A funding in February (\$22 million total since it was founded), the startup expects to recruit about 10 people and expand internationally, with a focus on the North American market.



Number of
employees
40

Founded
2018



Generate passive income with crypto

For everyone holding cryptocurrencies: Swissquote now offers “staking”, a high-performance savings strategy in which you lock your tokens to earn money. Jan De Schepper, Chief Sales and Marketing Officer, explains.

swissquote.com/staking

Cryptocurrency staking is now available at Swissquote. What is it?

This process allows clients to lock a crypto asset for a certain period, during which a predefined percentage of the asset is paid out to the client. It's similar to a savings account but in the crypto universe, with the notable difference that the percentages paid out for crypto are much higher! For example, the return is 13.95% gross annual for the token Polkadot (DOT).

How do the returns work?

The locked crypto assets are used to guarantee the security of the network and the validity of each new transaction. That's why you may also hear “validators” as a term for people who stake cryptocurrencies. Stakers receive new tokens in exchange for locking their assets and the services they provide to the blockchain. Returns are paid out at each validation cycle. For DOT, one cycle is approximately 24 hours.

One thing to note is that the technology used, called Proof of Stake, does not require immense amounts of energy to process calculations. It is far more environmentally-friendly than traditional cryptocurrency mining.

What is the process for Swissquote clients?

Our clients can easily activate this option right from their trading account. Swissquote takes care of all the technical details. Clients don't need to worry about it. All they need is to have a crypto asset that can be staked. They can also simulate the potential revenue over a given period. We already offer staking with Tezos (XTZ) and Polkadot (DOT) and plan to extend our offer soon to Ethereum (ETH), Cardano (ADA), Solana (SOL), Cosmos (ATOM) and Algorand (ALGO) tokens.

Is there a minimum required duration for staking?

No, the duration is flexible. Clients can stake or unstake at any time. But it's important to note that a staking or

unstaking request takes two working days to process, and funds will be blocked during that time. There is also the blocking period imposed by the blockchain during an unstaking. The duration of this lock depends on the token you choose. For Polkadot, for example, the required lock is 28 days.

What are the risks?

Given the high volatility of cryptocurrency prices, the token that you choose to stake could fall in price during the staking period. However, over the medium- and long-term, the Buy and Hold approach has proven to be effective in this market. Staking provides additional income. I see it more as an opportunity to accomplish two things at once. Additionally, staking can also protect you from the inflation induced by the creation of crypto to secure the network. ▲



JAN DE SCHEPPER
CHIEF SALES AND MARKETING
OFFICER



Ukraine: let's help together!

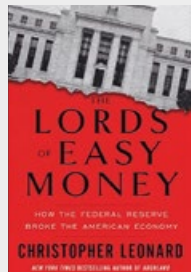
Donate now



Swiss Red Cross



TO READ, TO DOWNLOAD



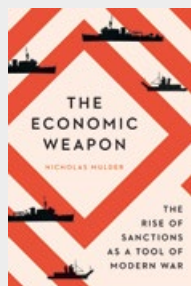
CHF 20.-

THE LORDS OF EASY MONEY

HOW THE FEDERAL RESERVE BROKE
THE AMERICAN ECONOMY

By Christopher Leonard
Simon & Shuster, 2022

As inflation is expected to reach record highs in the United States in 2022, this new book from Christopher Leonard, a journalist at the *New York Times*, serves as a definitive critique of the Fed's policies over the past 10 years. According to the author, the continued quantitative easing policy, which quadrupled the money stock in the United States, has led the American economy to the brink of implosion. It also only further deepens the divide between the rich and the poor rather than creating jobs and growth, which was the original goal.



CHF 30.-

THE ECONOMIC WEAPON

THE RISE OF SANCTIONS AS A TOOL
OF MODERN WAR

By Nicholas Mulder (audio narrated by
Liam Gerrard)
Yale University Press, 2022

Published just a few weeks before war broke out in Ukraine, this book comes at just the right time to delve into the history of economic sanctions and analyse their true effectiveness over the course of history. Designed in their modern version as an alternative to armed conflict, economic sanctions are part of the arsenal of modern democracies and are based on devastating war techniques. Going back through history, the author offers various examples such as the blockades during the First World War and the League of Nations sanctions against Mussolini when he invaded Ethiopia in 1935.



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Free, in-app
purchases

ELO AUDIO

DOCUMENT READER

The concept of Elo Audio is simple: rather than reading a document the old-fashioned way, why not listen to it? That is what this well-designed, easy-to-use app does. It can read almost every existing document type in 12 languages, including French and German.



Google Play,
App Store
Free, in-app
purchases

ACTUFLOW

FREE YOURSELF FROM YOUR SMARTPHONE

Here is a perfect app for controlling the time you spend on your smartphone. Once the app is activated, every time a user tries to use their phone, Actuflow asks the reasons for unlocking the screen and then generates statistics and usage reports.

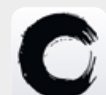


App Store
CHF 9.-

EōN BY JEAN-MICHEL JARRE

INFINITE RAVE

This app, designed by Jean-Michel Jarre, is perfect for listeners who love high-quality electronic music. Rather than offering a single finite catalogue, EōN is a constantly changing musical experience: the app itself generates music the entire time it is open, accompanied by psychedelic visuals that change based on the rhythm of the music.



Google Play,
App Store
Free, in-app
purchases

CARBO

HIGH-RESOLUTION SKETCHES

Of the handwritten notes apps, Carbo is becoming a leader, particularly due to its vectorisation options and high-quality image rendering, which can easily be touched up with graphics programmes. The app is particularly good when used with an Apple Pencil.

🔗 Crypto Assets

KEEP TRENDS AT HAND!



Take advantage of crypto volatility at the snap of a finger
while enjoying the security of a Swiss bank.



swissquote.com/crypto

 **Swissquote**



AUTO

Electric shock

BY RAPHAËL LEUBA

This electric estate car may not be Porsche's most charismatic model, but it transfers the brand's dynamic image and attention to detail into a silent world...



PORSCHE TAYCAN 4 CROSS TURISMO

ENGINE:

2 SYNCHRONOUS ELECTRIC ENGINES;
93.4 KWH BATTERY

POWER:

280 KW (380 HP), 500 NM

ACCELERATION:

0-100 KM/H IN 5.1 SECONDS

RANGE:

FROM 419 TO 453 KM (WLTP STANDARD)

PRICE:

STARTING AT CHF 115,100

The press release promises the “most versatile of all electric cars” no less. At a time when supply continues to grow, Porsche’s announcement may seem presumptuous. Let’s see what this rare gem is all about. Fundamentally, the Taycan is a sports roadster that updates the line of the Panamera, but abandoning the V6 and V8 for a stellar driving experience. The Turismo version has a tailboard and more spacious boot that turns it into an estate car, and a very elegant one at that. The Cross suffix gives the vehicle additional protection, promising a great adventure. But Porsche goes beyond the exterior aspects, as

evidenced by the four-wheel drive and the variable ground clearance.

INTIMATE AND SPORTY APPEAL

Other than an advanced digital interface, the cabin of the Taycan is rather conventional. Once you find the shifter anchored to the dashboard, it’s easy to get your bearings and find an optimal driving position. But the imposing middle console takes up a lot of space, while the inside cabin space is rather unimpressive for a vehicle that is nearly 5 m long, particularly in the rear seats. But the boot wins points, as it is deep and adjustable on this Cross

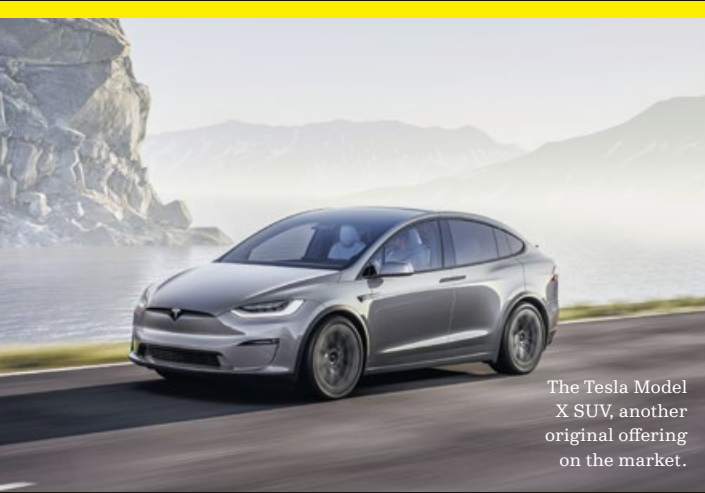
Turismo sport estate car. A second compartment is also located under the front bonnet. The interior finishes are lighter than other electric vehicles from the VW Group. However, the door pulls and very synthetic fabrics feel a bit budget-conscious. This is despite the 34,000 Swiss francs of potential upgrades added to the floor model, an entry-level at a price of 150,000 Swiss francs. For that price, there are thankfully quite a few benefits: the large panoramic roof, the sophisticated ambient lighting, the elliptical instrumentation dial, and the projecting contours of the air curtains that give the impression of driving a futuristic concept car. Just as captivating are the two electric plugs – one on each front curtain for added flexibility – that open with just a wave of your hand. And now for the essentials...

ART AND SCIENCE

It’s hard to talk about sportiness when the car is so quiet. Yet it does feel sporty! In addition to the impressive and immediate power of the two electric motors – one per axle tree for a total power of 380 hp (boosted to 476 hp with launch control activated) – the Taycan 4 Cross Turismo has quality running gear. The pneumatic suspension provides optimal body stability and erases all bumps in the road despite the low tyres, which are at least 275 mm (in the rear). The vectorial distribution of the torque on each wheel, associated with a rear directional axle, provides an unexpected agility for this 2,245 kg car (unloaded weight) that doesn’t feel remotely as heavy as it is. Additionally, the vehicle has a very small turning radius, as if to make up for poor rear visibility. The rear camera is a must!

Although the smoothness of the electric engine ups the cool factor, in terms of its limitations, it is very easy to feel the energy as you manoeuvre curves in the road, and you can choose between sport modes, including lowering the body.

ALTERNATIVES



The Tesla Model X SUV, another original offering on the market.

SPARSE COMPETITION

In this Cross Turismo interpretation, the Porsche Taycan is a rather unique model on the market. This is because it offers levels of power that are rarely seen in electric vehicles (625 hp for the Turbo S), except for the monumental Tesla Model X (above image). This exclusivity does come with quite a steep price tag, especially with the numerous options, as can be expected from the premium German brand. In this sense, Porsche is the exact opposite of the leading California brand, which makes a selling point of being “all inclusive”, by seriously reducing customisation options. In its basic version, the Taycan Cross Turismo has sparse competition in the world of electric crossovers – currently only the Audi e-tron S Sportback, or perhaps even the more compact Jaguar I-PACE and Mercedes EQC 400.

Much like the navigation, which is ultra-precise and not bogged down by assisted driving technology, the braking is also impeccable. The transitions between braking regeneration and six-piston calliper action are also completely seamless. The driver cannot supersede the intensity of the regeneration – or its deceleration speed – because it is carefully managed by the vehicle itself. But a button on the steering wheel does allow you to coast when traffic or altitude allow.

QUICK CHARGING

It is also possible to engage an artificial soundtrack, which isn’t very useful in the sense that there is no unpleasant driving or wind noises that need to be disguised. In this sense, the Taycan 4 Cross Turismo is truly as comfortable as a limou-

sine! But a limousine that is capable of tackling rough roads thanks to its variable ground clearance and drive settings specifically for sand and gravel. Of course, with a 93.4 kWh battery (net capacity of 83.7 kWh) and a test consumption of 25 kWh/100 km in varied conditions, your trip cannot exceed 350 km. But it’s possible to recharge the battery up to 80% in just 20 minutes at a 270 kWh rapid charging station with direct current – another incredible performance. It would take five hours with a 22 kW charging station with alternating current.

In conclusion, although versatility has been slightly sacrificed in favour of significant additional vigour, the Taycan 4 Cross Turismo is certainly one of the most complete electric vehicles on the market right now. ▲

TRAVEL

Creative getaways

We have hand-picked five travel options to help you hit your artistic flow, while disconnecting from the rest.

BY GAËLLE SINNASSAMY



BIARRITZ (FRANCE)

Make your own surfboard

A scent of resin. The hum of machines. At the Shaper House in Biarritz, you can create your own surfboard or stand-up paddle board from scratch, with help from professionals. After designing and drawing a model using 3D software, you move into the manufacturing phase. You start by shaping the polyurethane foam block. The board is then covered with fibreglass, then with resin, before the final sanding phase. The operation requires three to four half days of work for a surfboard, and four full days for a stand-up paddle board. “Our goal was to bring shaping (ed. note: manufacturing surfboards), still a relatively unknown craft, within reach of anyone,” says Sylvain Mornet, a professional shaper and manager of Shaper House. “Demand is very high these days because everyone is into the ‘do it yourself’ thing.” Once you’ve finished your board, all you have to do is hit the waves of Biarritz... Or enjoy some well-deserved rest and the local lifestyle in this immensely popular Basque seaside resort.

[COMPLETE SHAPING COURSE |](#)
[SHAPER-HOUSE.COM](#) | +33 (0)5 59 47 65 33 |
STARTING AT 115 SWISS FRANCS



FONTENILLE

LAURIS (FRANCE)

Blending your Lubéron wine

In the south of France, the Domaine de Fontenille nonchalantly overlooks the Durance plain from the southern slopes of the Lubéron to greet its guests in a bastide converted into a luxury hotel. In the heart of a carefully manicured park bordered by century-old cedars, the Relais & Châteaux estate has 19 rooms and suites along with two restaurants: Le Champ des Lunes, which has one Michelin star, and La Cuisine d'Amélie, an

elegant bistro that serves inventive cuisine developed around the best products from the estate garden. With its 20-metre heated outdoor swimming pool and its wellness area, the setting undoubtedly creates an aura of calm. But the Domaine de Fontenille also gives oenophiles a behind-the-scenes look into its winery, from a tour of its gravity-fed wine storage cellar to a tasting of its organic wines, to an exploration

of the 39 hectares of vineyards on a little pathway through the vines. The biggest wine enthusiasts can even try their hand as a Blend Master for a morning. The workshop programme includes examining several wines, blending your own vintage and creating personalised labels.

[BLEND MASTER WORKSHOP | LESDOMAINESDEFONTENILLE.COM | +33 \(0\)4 13 98 00 00 | 88 SWISS FRANCS PER PERSON PER MORNING](#)

REYKJAVIK (ICELAND)



TRICOT-TREK

Knitting between fire and ice

Hélène Magnússon's knitting tours are about venturing out through the volcanoes and glaciers of Iceland while learning to knit. Armed with yarn and needles, guests alternate between working with wool and trekking through the country's breath-taking landscapes. They offer an opportunity to meet local craftsmen (dyers, spinners, designers) and farmers who share their passion for this typically Icelandic art, combining traditional patterns and rustic wool. "I like designs that have strong ties with the local culture," explains the French-born designer from the Iceland University of the Arts. "My love

for knitting and my experience as a mountain guide are the starting point for these treks. All the itineraries are well balanced between exploring the country and developing skill in knitting workshops." Her treks provide a way of learning about Icelandic culture in a particularly calming way, knitting under the midnight sun or before the aurora borealis. Just choose your season. What all these tours share is that they are highly popular and have to be booked a year in advance.

[KNITTING TOURS | ICELANDICKNITTER.COM | HELENE@HELENEMAGNUSSON.COM | STARTING AT 1,690 SWISS FRANCS FOR A SIX-NIGHT TOUR](#)



ALCHEMY BAR

LAMEGO (PORTUGAL)

Create your organic cosmetics line

In the heart of a 19th century manor house nestled amid the vineyards is the Six Senses Douro Valley. True to the philosophy of the upscale hotel group, the resort focuses its concept on well-being, with a 2,200-square-metre spa and elaborate treatment programmes. An original feature of this location is the Alchemy bar. This space is where guests can design their own cosmetics under the guidance of an expert in a 60-minute workshop, or a half-day workshop for the most motivated alchemists. The 1,001 ingredients – set out on an old carpenter's table, layered with shelves holding flasks, mixing bowls, mortars and pestles – come straight from the hotel's aromatic herb garden. You are given plenty of choice to concoct a range of recipes, such as grape pulp soap made with grapes from the valley's vineyards, a sleep balm with plants from the hotel garden, an anti-stress roll-on, bath salts, a face mask or some massage oil. You all leave with your own creations, which you can keep as a souvenir or use in a spa treatment.

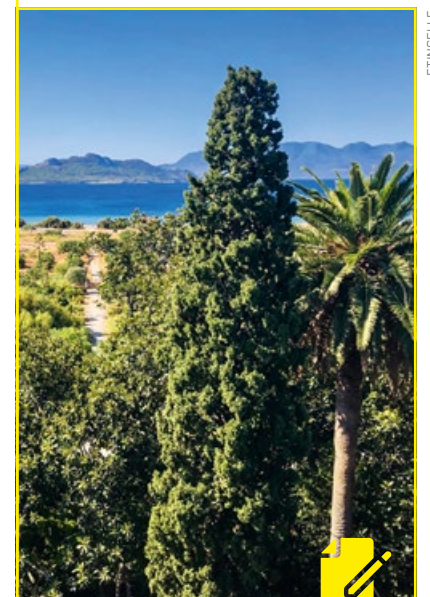
[ALCHEMY BAR WORKSHOP | SIXSENSES.COM/EN/RESORTS/DOURO-VALLEY | +351 254 660 600 | STARTING AT 52 SWISS FRANCS FOR A 60-MINUTE WORKSHOP](#)

AEGINA (GREECE)

Write while overlooking the sea

Here you can get your fill of pistachios, the local speciality, enjoy grilled octopus or sip Ouzo. Off the coast of Athens, Aegina offers the best of the Greek islands with its secret coves, clear waters, fishing ports dotted with multicoloured boats, traditional taverns built right on the beach, lively town streets and its majestic archaeological sites. All these images should inspire you in the creative writing courses organised by journalist, author and historian by training Maud Vidal-Naquet. The five intense days of filling blank pages are interspersed with other activities depending on the course. You can choose from meditation sessions, yoga or even ceramic workshops to unleash your full creativity. "Our courses allow you to live in the present moment, to vibrate with the elements and to let yourself go into the energy of a motivated and caring group," Maud Vidal-Naquet says. "You come away refreshed and amazed by your own creativity."

[CREATIVE WRITING COURSE | ETINCELLE.GR | +33 \(0\)6 82 45 14 35 | STARTING AT 695 SWISS FRANCS FOR FIVE DAYS OF WORKSHOPS](#)



ETINCELLE

BOUTIQUE

LUXURY SCOOTER

The Estonian startup Äike has unveiled its premium electric scooter, produced exclusively from renewable energy and built with 42% recycled materials and 92% recyclable materials. The model features large wheels and a wide standing deck to emphasise safety and comfort. Its rear ABS braking system is impressive, effectively bringing you to a quick but smooth halt even in wet weather. Äike tops out at 25 km/h with a range of up to 40 km. It also has a Bluetooth connection and an integrated GPS.

rideaike.com
CHF 1,890.-



COACHING MIRROR

The 1.85-metre tall Vault not only reflects your body from head to toe, but more importantly, it gives you feedback from one of its 60 virtual trainers available through its giant touchscreen. Whether you're into strength training, pilates, body pump or yoga, you can more easily reproduce the movements because you can watch yourself throughout your workout to correct your form. Once your session is over, you can store your dumbbells, yoga mats and elastics in the built-in cupboard.

nordictrack.ch
CHF 4,200.-



EARTH-FRIENDLY SPEAKER

Grundig has come out with Jam Earth, its portable Bluetooth speaker with a body made of 100% recycled and recyclable plastic. Offering up to 30 hours of play time, the mini format speaker (9.7 x 7.9 x 3.6 cm) has an integrated passive radiator for heavier bass. The IPX7 certification means that the device is waterproof and submersible for 30 minutes at a depth of 1 metre.

grundig.com
CHF 39.90



YOUR NEW TRAVEL BUDDY

Designed by a physiotherapist, the Cosifly travel jacket helps relieve back pain – from the neck to the lumbar region – when sitting for long periods. Made of 100% natural materials, the Cosifly has three adjustable pads and a detachable neck strap. Once at your destination, you can fold it up in seconds, like a poncho, and sling it over your shoulder or attach it to your trolley handle.

cosifly.com
CHF 159.-



ECO-FRIENDLY WINDBREAKER

Founded in 2018, the Lyon-based brand Nosc makes clothing and accessories that combine technical prowess and eco-responsibility. All its products are designed entirely in Europe using recycled and/or natural materials. The ultra-lightweight and water-repellent windbreaker is particularly impressive. Made of 100% recycled polyester from plastic bottles, the jacket is trimmed with breathable mesh and reflective patterns to enhance visibility.

nosc-sport.fr
CHF 154.-



STYLISH PROJECTOR

Samsung's new mini projector looks a bit like a spotlight. Stylish and ultra-compact, the Freestyle weighs only 830 grams and packs a built-in speaker, making it a sleek all-in-one solution. With Full HD resolution, it can project an image up to 100 inches (2.5 metres) diagonally. The projector has the unique feature of being able to rotate 180 degrees, which means you can look at a film or photo on the ceiling with your head nestled comfortably on your pillow.

samsung.com
CHF 999.-



FUNKY KEYBOARD

Forget the boring lines and monotonous black. Logitech has hit the scene with POP, its new compact wireless mechanical keyboard sporting a refreshing design. POP features a choice of three bright colour combinations: Daydream (mint and lilac), Blast (black and yellow) and Heartbreaker (pink and raspberry). Another striking feature is that the keyboard comes with eight interchangeable emoji keys (four keys are integrated into the keyboard itself). That way, you can customise your keyboard to match your mood.

logitech.com
CHF 119.-

TRIED AND TESTED

IMMERSION INTO THE METAVERSE

BY GÉRARD DUCLOS

With all the buzz around the metaverse, our reporter went on a jaunt through these virtual worlds.

Many futurists take it for granted that within a few years, we'll be spending a good part of our time in the metaverse, a hyper-real augmented reality virtual world where we can work, play, travel, meet and trade goods, if possible in cryptocurrencies.

Sound loopy? Nothing of the sort. This Matrix-like world is taken very seriously in IT, especially by Facebook (now called Meta to mark this technological shift), Microsoft and Nvidia. These tech giants are scrambling to be the first to deliver an operational metaverse and to capture this future market.

Until then, countless metaverse-themed projects have launched or are in the works to get in on the game. Practically all of them relate to cryptocurrencies and NFTs, as a way of earning and spending tokens in these virtual worlds.

Some metaverse projects are currently generating a lot of hype and anticipation. Even most of these – such as Illuvium, MyMeta MMO, MetaHero, and Star Atlas – are still nascent in their development but promise unprecedented immersion, an extremely lucrative token, and an imminent release date.

Explorers who want to get a head start and dive into the meanders of these new worlds basically have a choice between two options: “Decentraland” (token: \$MANA) and “Sandbox” (token: \$SAND), the two flagship projects currently surfing on the metaverse and crypto narratives. At the time of writing, the market capitalisation of MANA and SAND are \$4.5 billion and \$3.6 billion, respectively, and some parcels of land in these metaverses are going for hundreds of thousands of dollars.

Now that we're finally in the metaverse, what happens next? Well, not much

So, we're off for “Decentraland”, the market leader. In tune with the crypto/decentralised Web3 theme, you can connect to “Decentraland” for free directly from your browser, and sign in to MetaMask (an extension you can install to create a wallet and interact with the Ethereum blockchain ecosystem). No virtual headset is required, as the game does not currently have

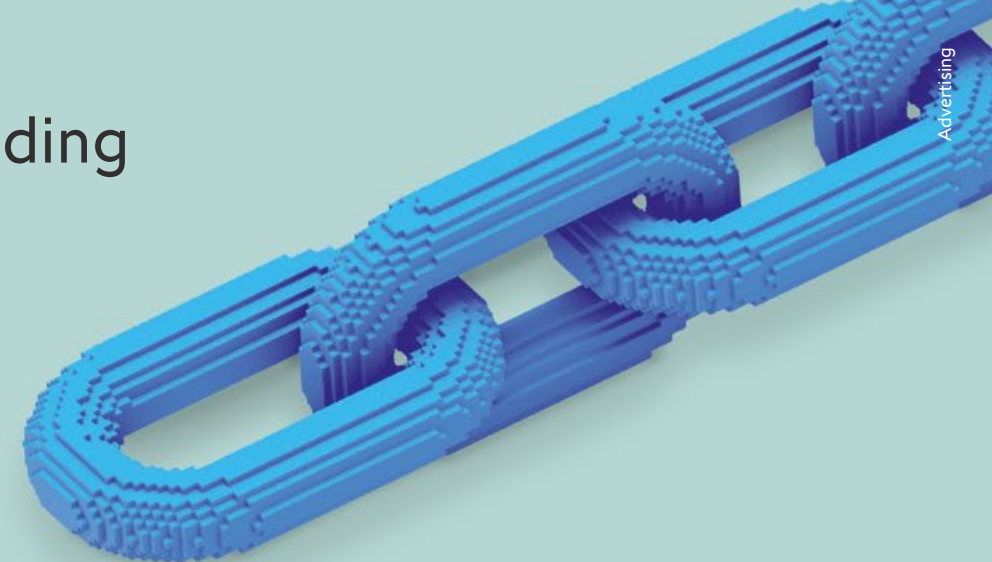
any VR functions. Once connected, it's easy to get started. You create a humanoid avatar from a plethora of customisation options and land in Genesis Plaza, Decentraland's lobby.

The first surprise is that the graphics and atmosphere are considerably sub-standard, even mediocre, compared with any recent video game. As for the immersive experience, we'll come back for that later.

Right, now that we're finally in the metaverse, what happens next? Well, not much: you wander around in empty spaces, chat with other users or occasionally attend a virtual event, such as a concert or an art gallery visit. For those who remember, the experience is very similar to “Second Life”, which came out in 2003. But at the time “Second Life” was disruptive and teeming with people and innovations... So what about “Sandbox”? More or less the same thing, albeit more fun and more complete.

After wandering around aimlessly for a few hours in these speculative no-man's lands set in rudimentary graphics, you almost wish that a GAFAM company would put an end to your agony and hurry up and design a metaverse worthy of the name. ▴

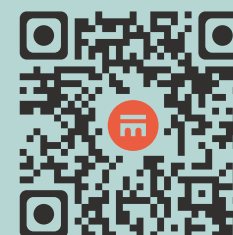
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