

the Banque Cantonale de Genève Magazine | Winter 2017/2018

Active portfolio management: the preferred choice in a bear market

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Blaise Goetschin CEO

Active portfolio management: the preferred choice in a bear market

For decades, proponents of 'index tracking' or passive management and supporters of active management have stuck stubbornly to their positions. Institutional and private investors wonder where to stand on this controversy to which no definitive conclusion has yet been reached.

Active managers take decisions on securities portfolios with total freedom of allocation or selection, apart from initial constraints stipulated in their mandates. This management style seeks to deliver a superior return to the benchmark index for the particular asset class by making differentiated choices of the components and proportions held. When the portfolio's return beats its benchmark index, this is called 'outperformance' or alpha in financial parlance. Outperformance is the end-goal of active management – an ambitious target and one achieved only when managers comply with all the methodological criteria and display stringent discipline in execution. Passive management is less ambitious – it simply replicates or tracks the index. This straightforward aim can easily be achieved at rather modest cost, justified, in any event, by low added value and practically zero expenditure on research and analysis. At first sight, this might be seen as a catfight over technicalities. In fact, it boils down to a fundamental debate about one of the most significant orientations of management philosophy.

The debate is regularly reignited in expert circles and in public. It has enabled some certainties to be arrived at. They include the fact that the two approaches are irreconcilable in theory. Consequently, investors cannot escape having to make a choice of principle in favour of one or the other. Hybrid approaches have indeed been attempted. Known as 'core & satellite' or 'smart beta', two symbiotic methods, which we do not have space to consider in detail in this brief editorial, only appear to deliver some sort of solution. A straightforward choice has therefore to be made between a mechanistic technique and actively piloted management.

This fundamental dilemma is taking front of stage again now that share valuations have hit new highs. The question is this: if markets correct, on a scale or at a moment in time that cannot be foreseen, which of the two approaches will better protect the portfolio?

Empirical data have shown that the best mandate or investment fund managers tend to perform strongly in bear markets. That is understandable, since a correction takes place instantly across the board through cross-contamination. This phenomenon of a spontaneous parallel shift is fuelled by the market's behavioural features, by automated trading and by index-tracking management itself. Once the first collective shock has subsided, the market takes stock again and begins to discriminate positively on the basis of more fundamental factors, favouring resilient securities, but exacting a heavier toll on the weakest which had been overvalued.

In such circumstances, amid high market volatility, active management rooted in early individual picking of the finest securities creates a positive return differential. We are not talking about pseudo-active management here, which lacks boldness of approach and remains wedded to the index with a few minor variations. We are now referring to genuine and authentic active management which stands by its decisions, notably by unambiguously steering clear of equities or sovereign bonds that fail to convince the manager or, conversely, by placing more cash in a security beyond its index weighting. Active management has the bonus of offsetting the over-concentration effect of the index-tracking model which, for its part, is obliged to invest in proportion to the capitalisation of each security. These are selection or censorship options which create opportunities for outperformance, especially if stock markets experience a hard landing. Hidebound by its arithmetical formula, the index-tracking approach, with its all-encompassing and all-inclusive character, lacks the basic freedom to decide not to make a purchase.

Investors should resist the sales pitch, especially highlighting the cheaper cost of passive management. Although cost savings may well boost the returns by a few points when the going is good, the drawbacks of being ensnared in the index in turbulent markets should give pause for thought. The economic fundamentals of these two approaches must be questioned before adopting one of the two religions. One postulates the primacy of judgement and human intelligence, whereas the other is more sceptical and makes do with an elementary algorithm. "Truth and the dawn bring light in good time" (Amharic proverb).

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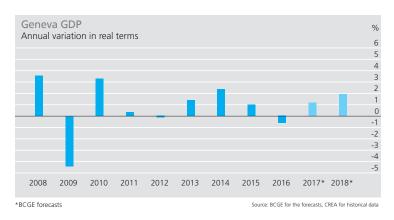
Geneva economic dashboard

Economic situation for the current year and forecasts

Forecasts

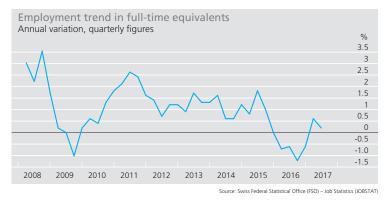
Macroeconomy	GDP	Inflation	Unemployment rate	
	2017 2018	2017 2018	2017 2018	
Switzerland	1.3% 1.6%	0.5% 0.6%	3.4% 3.3%	
Geneva	1.1% 1.9%	0.6% 0.6%	5.3% 5.3%	
Eurozone	2.0% 1.8%	1.5% 1.7%	8.8% 7.8%	
United States	2.3% 2.6%	2.0% 2.5%	4.6% 4.6%	
Official interest rates	3 months	12 months	18 months	
Switzerland	-0.75%	-0.75%	-0.75%	
Eurozone	0.00%	0.00%	0.00%	
United States	1.50%	1.75%	2.00%	
10-year interest rates	3 months	12 months	18 months	
Switzerland	0.0%	0.1%	0.4%	
Eurozone	0.5%	0.7%	1.1%	
United States	2.3%	2.8%	2.6%	
Forex and oil	3 months	12 months	18 months	
EUR/CHF	1.13	1.13	1.20	
USD/CHF	0.98	0.98	0.96	
EUR/USD	1.15	1.15	1.25	
Crude oil – Brent (USD/barrel)	55	60	65	

Source: Thomson Reuters & BCGE



Timid and mixed recovery

The improvement detected in Geneva in the first half continued gingerly in the third quarter, although the pattern varied from one sector to another. In the hotel trade and financial services, optimism has been the order of the day, whereas progress has been less recent in industry, construction and restaurants. Retail trade has been enjoying the welcome recovery experienced since the start of the year, but is being unsettled by unsatisfactory progress of business in October. Lastly, forecasts are looking more upbeat, general economic conditions are favouring growth, and Geneva's GDP is expected to rise by 1.9% in 2018.



Employment picks up slightly

On the jobs front, the signals are looking good. Firstly, the employment index in full-time equivalents (FTE) rose for the second quarter in a row (+0.2%) after falling throughout 2016. However, FTE employment growth was slower than in the three previous months (0.6%). Then again, as in the first half, the cantonal payroll rose in the third quarter (2% average annual variation in nominal terms). Last but not least, the unemployment rate remained stable in October, falling by 0.3 of a point year-on-year.

Low inflationary pressure

The trend on prices confirmed the timid signs of recovery; prices have continued climbing, but without excesses. In October, the Geneva consumer price index advanced by 0.1% month-on-month, equivalent to an average annual variation of 0.5%. That is the fastest inflation rate since 2011. Items that are costing more include petroleum products, books, air fares and clothing. Inflationary pressure is likely to remain subdued in months to come, fuelled primarily by rising wages.



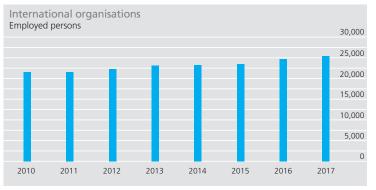
Overnight hotel stays: record quarter

Nearly 872,400 overnight stays in hotels between July and September: this is a quarterly high for Geneva. On the other hand, no new monthly record was set, but, with 297,082 overnight stays in August, success on this scale has not been reported since 1985. This volume, 5.7% higher than in the same month of 2016, was recorded first and foremost thanks to foreign guests who flooded into the canton (+6.2%), topping the figure of 700,000 overnight stays in the quarter for the very first time. The influx of Swiss visitors was also up (+3.6% at 141,800 stays).

Overnight hotel stays per month Monthly figures in thousands 300 4 5 6 5 6 5</td

30,000 people in international organisations

29,500 people employed and 6 billion francs spent: that is the contribution made by the sector of international organisations, missions and consulates, together with the 380 non-governmental international organisations. These figures, higher than in 2016, once again illustrate the importance of this sector for the cantonal economy. The OCSTAT survey which draws up a list of organisations and refers to their statutes also highlights the particular strength of conference activity in Geneva.



Source: OCSTAT - Survey of international organisations

Interest rates expected to remain negative

Now that the European Central Bank has, as expected, confirmed the tapering of its asset-purchasing programme, it will maintain pressure on bond yields in Europe. The same scenario is expected in Switzerland where the SNB has reaffirmed the need for expansionary policy despite the slight upward revision of inflation forecasts. Negative rates are thus set to continue here. The United States, where the Fed officially kick-started its balance-sheet downsizing policy last October, is the only country in which rates are being raised.

BCGE Asset Management



Geneva, culture and society

Between science and fiction: three Genevan science fiction authors

Noëlle Roger (1874-1953), author of Le Soleil enseveli ("The Buried Sun") (1928).

For more than three centuries, Genevan scientists have enjoyed international renown. Their discoveries have spread worldwide. As early as the 18th century, a mathematical treatise by Gabriel Cramer found its way into a Peking library just one year later, while other denizens of Geneva, like Bonnet, Trembley, Mallet or de Saussure, made breakthroughs in chemistry, physics, biology, astronomy and botany.

Perhaps by chance, a woman, Mary Wollstonecraft Shelley, also wrote the story considered by many to be the first science fiction novel ever here in Geneva: *Frankenstein; or, the Modern Prometheus.* The first draft of her work was written in Cologny to escape from the boredom of cold and wet evenings in 1816, known as 'the Year Without a Summer'. The author imagines a Geneva scientist, Dr Frankenstein, who breathed life into an artificial creature which then escaped to become a monster.

On the moon and on Jupiter

A quarter of a century later, in 1840, Rodolphe Töpffer, an archetypal Genevan, wrote a story in prints, *Docteur Festus*, which sent its hero up to orbit around the earth like a satellite. In "*Voyages and Adventures of Docteur Festus*" which adopted the cartoon scenario in the same year, we read that Dr Festus "had reached such a high altitude that he saw the earth as a great sphere on which he could only discern the continents and the seas: the latter in a beautiful azure blue while the land took on a luminous and suave colour".

Science fiction generally breaks with the two traditional reference frameworks of space and time. The journey to the moon is a classic of the genre, as employed by Cyrano de Bergerac (the 'real' Cyrano), Jules Verne or Hergé. In Geneva's case, mention must be made of Voyage à la lune et au-delà ("Journey to the Moon and Beyond") by Charles de l'Andelyn, the pseudonym chosen by Jules Pittard (1892-1976), a master at Geneva College, now known as Calvin College, between 1916 and 1951. His novel in fact recounts two trips: one to the moon and the second to Jupiter. Reaching the moon was easy because the traveller simply had to take a scheduled commercial flight from Colorado. Once on the moon, the protagonist meets a scientist who has invented an atomic engine that would enable him to cross the universe. As Mars is already being exploited, the two men set out for Jupiter, a cold planet, inhabited by four warring tribes. Published in 1959, three years after the first Sputnik launch, the expectancy value of a trip to the moon is guite low compared to the idea of commercial exploitation of such a trip by the "American company for journeys from the Earth to the Moon", which prefigures Elon Musk's aspirations today.

Towards the end of the world

The other parameter that science fiction likes to alter is that of time, because it tends to project the reader into a more or less distant future. In a novel published in 1931, Les derniers jours du monde ("The Last Days of the World"), Charles de l'Andelyn stays down here on Earth, describing an apocalyptic world destroyed by far-reaching climate change. He imagines the extinction of the sun, a new ice age on Earth before the last man and the last woman embrace in the snow on the banks of the Congo River! Climate cooling spells the end of mankind.

A Genevan female author, Noëlle Roger, also penned several science fiction novels. Her real name was Hélène Dufour (1874-1953), wife of Eugène Pittard, who founded Geneva's Museum of Ethnography. In an interview, this author explained how she worked: "I do not think that I have set out from an abstract idea in any of my novels. It was always a kind of shock, a vision that took pride of place, a message as it were. After sketching out the novel, I ask a man of science, a geologist, physicist or biologist, to give me the details needed to make the story seem plausible." That is how she hit upon the vision of a flood unleashed to drown the world and went on to write Le Nouveau Déluge ("The New Flood") first published in 1922 with a new edition in 2014. The storyline focuses on a family who have taken refuge at an altitude of over two thousand metres above Champéry to escape the rising waters and who patiently recreate some elements of civilisation amid this global destruction. Having herself spent a great deal of time in the mountains, the author LE ROMAN FANTASTIQUE DE SCIENCE FICTION describes travel to all kinds of high-mountain environments, and talks about the rich flora, because plants prove precious for survival in a harsh environment.

From Atlantis to the new Man...

In another novel. Le Soleil enseveli ("The Buried Sun") (1928). Noëlle Roger presents a group of friends sailing westwards in search of Atlantis, an island unknown to cartographers and looking like a barren rocky outcrop rising out of the sea, before the expedition goes on to discover a temple carved out of the rock where a bright light of unknown origin shines out. Once back home in Europe, the doctor who thought up this journey begins to work miraculous cures inspired by his discoveries made in the famous temple. In this novel, Noëlle Roger suggests the existence of another world, different from the one familiar to contemporary science. A world in which some men have supernatural powers. Incidentally, this belief in spirits can also be found in Camille Ferrier's novel, Le Baron Bernard (1896-1900) and was shared by many intellectuals of the day who made tables gyrate to communicate with spirits of the departed.

"The reader can still enjoy these novels today; that explains why some of them have been republished."

Le Nouvel Adam ("The New Adam") (1924) is set in a clinic where avant-garde research is being conducted, in particular a successful brain transfer and the invention of a machine enabling influences to be exerted from a remote location. In Le Chercheur d'Ondes ("The Wave-Seeker") (1931), the author continues her reflections inspired by the progress of radio and, again, uses this idea of a machine capable of exerting an influence. Crimes are committed without any possibility of tracking down their author because they are perpetrated by a third party influenced by the machine.

The reader can still enjoy these novels today. That explains why some of them have been republished. The romanesque vein of science fiction is constantly being exploited and has been developed extensively in contemporary literature. Genevan writers have their place here, including Laurence Suhner, whose trilogy published in 2013-2015 by Editions de l'Atalante, has already become a milestone in the literature of French-speaking Switzerland.

As we can see, many have followed in the footsteps of Frankenstein's creation, including some stories written by Genevan authors.

Bernard Lescaze

To find out more

Readers might be interested in Le roman fantastique et de science-fiction ("Fantasy and Science Fiction Novels") in Geneva 1816-2016, published in Geneva, in 2017, by the Société genevoise des écrivains. This book contains three studies of Camille Ferrier, Noëlle Roger and Charles de l'Andelyn, together with unpublished texts by three contemporary Geneva authors, Florian Eglin, Eric Golay and Laurence Suhner.

Geneva at the heart of Firmenich's development

The group, with its 7,000 employees worldwide, is the biggest private company in the fragrances and flavours (F&F) industry, generating annual sales worth 3.3 billion francs.

A highly diversified business portfolio

Benefiting from its global presence across more than 100 markets with 30 production sites and four R&D centres, the Firmenich Group has a very extensive business portfolio. "We have four main business lines", Eric Nicolas, the company's CFO, explains: "Creation of fragrances, in which we are world number one, fine perfumery with some of the world's greatest creators on our books; flavours, where we have a highly sophisticated nutrition agenda; ingredients, which allow our perfumers and flavours experts to create unique experiences; and research, the cornerstone of all our activities, at the very core of our differentiation and value creation".



A strong commitment to sustainable development

Sustainable development is an integral part of Firmenich's DNA, at the very core of its fundamental values and its strategy. That is why, after attending COP 21 in Paris, the group adopted highly ambitious environmental targets, with the aim of becoming a business with a carbon-neutral footprint. By way of example, Firmenich has set itself the goal of operating with 100% renewable energy by 2020. This year, the group has already achieved a rate of 65% worldwide. In Switzerland in particular, it is now operating with 100% renewable energy, making use exclusively of hydraulic energy.

Firmenich is innovating to tackle some of the greatest challenges facing our society, such as poor nutrition, hygiene and sanitation. According to the WHO, more than 2 billion adults and over 40 million children are either overweight or obese. To fight this pandemic, for more than 10 years, Firmenich has been developing advanced taste-modulation technologies which enable sugar, salt or fat content to be cut by up to 50% without compromising on taste. Thanks to these technologies, the group estimates that it has removed over 100,000 tonnes of sugar, equivalent to 520 billion calories, from its clients' products this year.

"With the concentration of our research and creation teams in Geneva, this is where we are inventing the products of the future."

Firmenich is committed to the fight against the global sanitation and hygiene crisis. In fact, more than 2.5 billion people living in developing countries do not have access to health-care infrastructures as we know them. That situation gives rise to epidemics and, in particular, an infant mortality rate of more than 800,000 children a year linked to poor hygiene and sanitation. When Firmenich realised that its in-depth knowledge of the science of smell could help to fight this scourge, the business mobilised its efforts. In partnership with the Bill & Melinda Gates Foundation, Firmenich has developed advanced technologies which enable malodours to be effectively countered. To accelerate its impact, Firmenich is working with its clients to ensure that its technologies are accessible to populations who are in need of them through affordable hygiene products. Firmenich is cooperating for instance with the Government of Poona, in India, to ensure development of suitable toilet infrastructures and with the Toilet Board Coalition to support a new generation of innovative entrepreneurs, known as Sanipreneurs, who are reinventing the low-cost toilet system.

Geneva at the heart of Firmenich's activity

Geneva has been the location for Firmenich's headquarters since its creation in 1895, and lies at the heart of the group's value-creation process, because the canton is home to three production sites and the company's main R&D facility. "With the concentration of our research and creation teams in Geneva, this is where many products are being invented for the future", Eric Nicolas explains. Each year, Firmenich invests 10% of its sales in this sector, notably in the fields of organic chemistry, biochemistry, biosynthesis and the cognitive sciences. To support the Canton of Geneva's vision for the Praille-Acacias-Vernets sector (PAV), Firmenich recently sold



Sourcing natural products for a sustainable experience

In response to growing consumer demand for natural products which are, at one and the same time, ethical, sustainable and traceable, Firmenich has created *Naturals Together*. From vanilla in Madagascar to jasmine in India, Firmenich has built strategic alliances with the world's finest producers of natural ingredients. Working directly with communities of farmers, who are at the origin of its product lines, Firmenich is committed to acting on their behalf and invests in projects which help to enhance their quality of life. In Madagascar for instance, where Firmenich is focusing on growing vanilla sustainably, the company has invested in wells to improve access to water, opened a dispensary to provide medical care, where 40 babies were born this year, and is about to open a school and launch a training programme for young adults to secure the future of generations to come.

its historic headquarters at La Jonction. By relocating all its operations from La Jonction to Meyrin-Satigny, Firmenich will be investing over 100 million francs to create an Excellence Campus here by 2020. This campus will be home to an R&D centre with enhanced creative activities. In addition, Firmenich has recently invested more than 60 million francs to transform its perfumery plant in Meyrin; this is now a technology leader with an automation rate of more than 90%. Thanks to the digitisation of many processes, Firmenich has expanded this plant's production capacity by 30%, while maintaining employment and upskilling posts. In parallel, the site has cut its energy consumption by 20% and water use by 30%.

All these investments show just how essential Geneva is to Firmenich. The group intends to continue developing its business here, because this is where the crucial functions needed to export and invent for the whole world are concentrated.

Marie-Christine Lang

See the BCGE channel on YouTube.



Strong population growth for Soral

In recent months, Soral's local council has built two properties with 14 family homes that are harmoniously integrated into the outstanding heritage character of this beautiful and wellpreserved village. The new tenants took possession of their homes last summer.

Soral in numbers

Population: 770 Proportion of cantonal population: 0.16% Land area: 294 ha Proportion of cantonal territory: 1% Income: 2.2 million Expenditure: 2.2 million Local council Mayor: Raul Florez Deputy Mayor: Anne Jaggi Deputy Mayor: Gérard Fontaine

1,000 inhabitants by 2019

Work began in 2015 on a plot of land acquired by the local council on the edge of the village. Promoting collective living, the two properties with outstanding architecture are grouped around a central hub-like courtyard and surrounded by gardens and an orchard. In response to the village authority's wish to provide cross-generational homes, they include 14 apartments with 3 to 6 rooms. Soral's local council has made use of the cantonal public housing programme (LUP), with 8 housing units benefiting from subsidised rents. The apartments for which demand is very high - Philippe Revillet, Secretary General of the local authority reports that 70 applications were submitted - have been allocated as a matter of priority to people who have ties with Soral and the life in the village. Philippe Revillet points out that current building projects will raise the population size from 770 to 1,000 by 2019: strong growth for this locality where the main activity is farming and wine growing.

High energy performance and ecological design

The architectural competition was won by the Geneva Widmann architects firm in 2014. Their construction project places emphasis on high energy performance consistent with the law on energy and the wishes of the local council. The buildings are heated by 100% renewable energy sources using a boiler fuelled by pellets (wood granules) in the basement. The choice of wood to build the façades and roofs also assures optimum insulation of the interior spaces while encouraging the use of natural resources. As for the exterior spaces, the courtyard situated between the two buildings is made of stabilised sand to allow rainwater to filter through and reduce impervious surfaces to a minimum. The gardens have been carefully landscaped to permit biodiversity and provide access to the surrounding fields. An orchard of apple and pear trees has been replanted at its previous location on this site.

Respect for the village character

The locality has paid special attention to the siting of this plot in a 4B protected development zone governed by special provisions applicable to Genevan villages. In cooperation with the Cantonal Monuments and Sites Department, the architects and local council have carefully chosen the materials used for the external spaces, respecting the typical Soral environment. A decision was taken to promote the use of brushed pebbledash and wood for the façades. The architects added a contemporary touch to the structure with metal roofing and generously sized windows. Last but not least, all the apartments are accessible from the outside via the central courtvard and external walkways on the different floors, reflecting the typical village habitat and fostering neighbourly contact between residents.

Marie-Christine Lang



Soral in brief

The earliest traces of human presence in Soral date back to the Celtic era. The first written historical record of the village refers to the noblemen of Rougemont who gave the locality its coat of arms. In the 12th and 14th centuries, they owned a fiefdom which included Soral where the castle lay on the right bank of the River Laire. The Treaty of Turin of 1816 separated Soral and Laconnex from the Savoy locality of Thairy and united them with Avusy. The Treaty of Vienna required the new parish to build a church which, after first being envisaged halfway between Laconnex and Soral, was erected in the latter village. Divergent interests soon brought conflicts between the parishes which the government tried to appease by appointing two mayors, one for Soral and Laconnex and one for Avusy. In 1848, the Grand Council decided to create the locality of Avusy and, two years later, to separate Laconnex and Soral.





BCGE awards its **Economics** Prizes

Ten Banque Cantonale de Genève Economics Prizes were awarded between September and November to mark the graduation ceremonies from four training institutes in the canton. They cover many different courses ranging from the Professional Training Centre for Commerce to entities such as the Geneva's Haute école de gestion (HEG), the ISFB and the University.



Schwarzentruber and Professor Jean-Paul Vulliéty (GSEM)

Commerce graduate, and Jean-Luc Gruaz (BCGE)

The Bangue Cantonale de Genève Economics Prize is a natural extension of the bank's commitment to training. It is also a way of celebrating the performance of students who take a special interest in economics and a tangible token of the motivation that the bank wishes to pass on to future generations of young graduates.

For the professional school-leaving certificates (full-time and sandwich courses) obtained from the schools that form part of the Professional Training Centre for Commerce, the prize is awarded to the student from each establishment who has obtained the best combined average mark for law, political economy and business management.

Winners are also selected from four university-level or professional institutes. The prize is awarded to the chosen student from the Master of Arts course in International Trading, Commodity Finance and Shipping, at the Geneva School of Economics & Management (GSEM) Faculty at the University of Geneva. At this same faculty, the student who has obtained

the highest mark on the bachelor's degree course in Economics & Management with a major in Economics receives the award. The prize is also awarded to selected winners from the Bachelor of Finance course, Banking & Finance option, at the HEG, and students taking the Master of Advanced Studies in Banking & Finance at the ISFB in Geneva.

BCGE gives its heartfelt congratulations to all the prizewinners. This year, the prizewinners were: for the Professional Training Centre for Commerce: Caroline Berthoud, Dominique Brungger and David Cardoso; for the Master of Arts in International Trading, Commodity Finance and Shipping (GSEM), Severin Schwarzentruber; for the Bachelor's degree in Economics & Management, with a major in Economics (GSEM): Arnaud Schneider; for the HEG: Nicolas Finsterwald, Célia Girardin and Aviv Merci; and for the ISFB, Claude Anker and David Gorgone.



Dominique Brungger, graduate from the Nicolas-Bouvier School of Commerce, with Stéphane Kursner from the La Jonction branch

From left to right, Alexandre Scala (BCGE), prizewinners Claude Anker and David Gorgone, with Frédéric Ruiz (ISFB)







éco21 certificate for BCGE

SIG presented BCGE as a "committed business" with the éco21 certificate in 2017. This attests to the fact that the bank has implemented the energy performance measures to which it has made a commitment under the SIG energy-saving programme. Implementing this plan has enabled electricity consumption and greenhouse gas emissions to be cut. The éco21 programme seeks to reduce energy consumption and CO₂ emissions without sacrificing comfort or competitiveness.

News

BCGE in Dubai: a bridge with the Middle East

BCGE's satellite entities are presented, one by one, in *Dialogue*. Mario Al-Jebouri, Head of the Dubai representative office, answered questions put by the magazine.





Mario Al-Jebouri Head of the Dubai representative office

What is the image of Switzerland in Dubai?

This question almost immediately brings a smile to the face of all Emiratis, maybe because it is such a topical question to ask considering the United Arab Emirates' (UAE) ambition to emulate the global image of Switzerland as far as possible. Every conversation which turns to the subject of Switzerland almost inevitably highlights such advantages and qualifications as quality of life, stability, reliability, predictability, technology, innovation, luxury, education and professionalism. These are just some of the testimonials used to describe Switzerland. In financial circles, Switzerland is still regarded as a safe haven, a reliable jurisdiction with a business-friendly environment providing professional and dependable services.

What are the advantages of Dubai as a financial centre compared to other centres in the region?

Dubai is a global financial centre strategically located between East and West, providing a stable and secure platform for businesses and financial institutions. The country's internationally recognised and independent regulation, common-law framework, tax-friendly regime, extensive investments in infrastructure and enabling environment make it the ideal hub to access the region's rapidly growing demand for financial and business services. The UAE has enhanced its position as the leading financial hub in the Middle East, with Dubai and Abu Dhabi claiming first and second regional rankings in the twice-yearly Global Financial Centres Index (GFCI).

Which sectors of the economy stand to prosper in coming years?

Dubai's economy can be summarised across six major economic sectors, namely: wholesale and retail trade (25%), transport (14%), real estate (13%), manufacturing (13%), financial services (12%) and construction (8%).The forthcoming *Expo 2020* will result in most economic activity over the next three years being focused on infrastructure development, real-estate construction, tourism, transportation and retail trade.

What role does the Dubai office play as a competence bridge?

The representative office is BCGE's hub in the Middle East and North Africa Region. It draws on the bank's expertise in Switzerland, especially its management skills. The BCGE Asset Management business unit in Geneva offers customised solutions for wealthy individuals keen to deposit their assets in Switzerland. Moreover, the Xpatbking.ch concept (see page 14) has a specific offer for expatriates. The representative office also acts as a gateway, providing access to the expertise of the bank's corporate finance team and that of its Capital Transmission subsidiary which takes part in the financing of development projects for Swiss companies that have not yet been listed or for the acquisition of companies as part of investment or succession projects. The Dimension subsidiary, for its part, is the ideal discussion partner for business owners who want to analyse their business's potential valuation and pass on business ownership. Last but not least, the Dubai representative office is the BCGE's and Swiss economy's ambassador in the region; it acts as a relay between local players and interested parties in Switzerland. It is also pleased to host the Swiss authorities when they travel to this part of the world.

Address

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Belén Ferrier, gilder-framer, winner of the 2017 *Prix de L'Artisanat*

The *Prix de l'Artisanat* (Craft Trades Prize) award ceremony for 2017 took place on 30 October at Palais Eynard, in the presence of State Councillor Pierre Maudet, the Mayor of Geneva Rémy Pagani, Thierry Apothéloz, Chairman of the Association of Geneva Local Authorities, Claude Bagnoud, member of BCGE's Executive Board and Hélène de Vos Vuadens, Head of BCGE's Communications & Investor Relations Department. This year, the jury awarded the prize to gilder-framer Belén Ferrier, an expert craftswoman in this specialised and unusual art trade. BCGE has supported the *Prix de l'Artisanat* since 1999.

After studying hospitality and tourism, followed by humanities, Belén Ferrier decided to work with a gilder-framer craftsman who passed his expertise on to her over a period of five years. In 2006, she opened her own art-framing and restoration workshop in the Plainpalais district. Helped by her apprentice, Belén Ferrier produces unique creations with antique or contemporary frames and mouldings. They are made using the same techniques as those adopted by the Egyptians to gild sarcophagi.

All the frames made by Belén Ferrier – in wood with fine gold finish, silver leaf, lacquer, precious wood or wrought iron – respect the craft and personalised approach to this creative activity which calls for great sensitivity and establishes a direct link between the artist and the collector or gallery-owner.

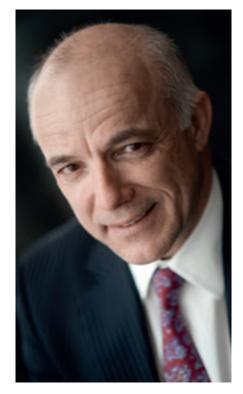
Belén Ferrier believes the oldest frames are exceptional artistic achievements, because they were made with such care and patience. The function of the frame is to showcase the artist's work in its finest light. Depending on its style, format, colour and material, the frame can radically change the way in which a work is perceived.

The Online Stock Trading 1816 platform welcomes its 8,000th investor

Banque Cantonale de Genève's online stock trading platform administers assets with a value in excess of 550 million francs. Launched in April 2010, the bank's online trading platform operates under the 1816 brand: a reference to the date on which the bank was founded. This tool is an integral part of Netbanking and the mobile Netbanking app, solutions which handle all accounts and payments. 1816 can be activated without charge to buy and sell securities in complete independence. 8,000 users already participate. They benefit from free access to detailed and up-to-date stock-market information online via the site and the Yourmoney application. 1816 allows investors to invest in Swiss and international securities on stock exchanges in Europe, North America, Australia and Asia (Tokyo and Singapore). It is positioned with highly advantageous prices for both custody and brokerage fees. Buy and sell transactions worth up to 1,000 francs are billed at 8 francs for equities and bonds on the Swiss market and for bonds on the euro market. For trades between 1,001 and 25,000 francs, the brokerage fee is 35 francs. Custody fees amount to 0.10% a year, regardless of the domicile of the security, and do not apply to BCGE securities and Synchrony funds. The 1816 platform is easy to use, attractively priced and operationally robust.



Six years at the service of the CERN pension fund



Pierre Sauvagnat, Head of BCGE's Financial Markets & Treasury Department, has held two successive terms of office on the Investment Committee of the CERN Pension fund, an entity responsible for assets worth 4 billion francs. In those six years, the maximum term permitted by the fund's regulations, Pierre Sauvagnat has contributed to setting a target for the return on investment which includes a risk budget. During that period he witnessed the renewal of many members of the Investment Committee and the management team. Since he first joined the committee, returns have exceeded the set target. The fund or its representatives have also won a number of prizes. In 2015, Institutional Investor named it Swiss Pension Manager of the Year, and in the 2016 Peerto-Peer Swiss, German, & Austrian Awards, Chief Investment Officer of the year. For its part, Investment Pensions Europe Real Estate chose it as Best Medium Real Estate Investor in 2016.

News

Xpatbking.ch: banking solutions for expatriates

Xpatbking.ch is a service provided by BCGE for expatriates who have assets in, or family ties with, Switzerland as well as for expatriates from other countries based in Switzerland. It focuses in particular on asset advice, pension and estate planning, private banking and assistance with property projects. This concept corresponds to a clearly identified development axis because Swiss expatriates sent abroad by their employers represent a population estimated to number several hundred thousand people, while foreign expatriates in Switzerland are also very numerous.

This much-appreciated service is offered in French-speaking Switzerland through the bank's Geneva establishments and its branch in Lausanne; the Zurich branch does so in German-speaking Switzerland. This service can be accessed via our representative





offices in Dubai and Hong Kong. BCGE is one of the few financial institutions to offer a service of this kind and cooperates actively with the Organisation of the Swiss Abroad.

BCGE Essentials of Finance 2017 lecture cycle focused on artificial intelligence



The Essentials of Finance seminar cycle organised by Banque Cantonale de Genève focused in 2017 on strategic themes linked to the challenges of the third millennium: artificial intelligence touching upon all fields and sectors of activity, calling into question how businesses are organised and run, and the way human beings live. Technologies and new ways of thinking which form part of a logic of economic prosperity and global competitiveness. Exceptionally qualified lecturers discussed these issues before an audience of investors and entrepreneurs faced with a reality that is changing very quickly in a world in which generations X, Y, Z and Alpha live side by side. The complete lecture cycle ran over four mornings and two evenings of original presentations. Seventeen speakers and more than

450 participants attended BCGE Essentials of Finance 2017. Prestigious international speakers, including the scientists Joël de Rosnay and Laurent Alexandre, took part.

Three of the mornings are the subject of a special issue of *Revue Économique et Sociale (RES)*, with which BCGE has been in partnership since 2007. That publication was created in 1943 to stimulate the economic and social debate by proposing articles by researchers and professionals with well-informed and rigorous points of view on topical issues and sensitive subjects.

Our clients may request free copies of this special issue from the Communications & Investor Relations Department or by sending an email to communication@bcge.ch.

News

BCGE awarded the *Prix de l'Économie genevoise* for 2017



Morel, Board Member (CCIG), Gilbert Probst, Chairman of the Board of Directors (BCGE), Hélène de Vos Vuadens, Head of the Communications & Investor Relations Department (BCGE), Blaise Goetschin, CEO (BCGE), Serge Dal Busco, Councillor of State, Frédérique Reeb-Landry, Chief Executive Officer (CCIG), Claude Bagnoud, member of the Executive Board (BCGE), and Alexandra Rys, Communication (CCIG).

On 9 November last, at its 15th Economics Event, the Geneva Chamber of Commerce, Industry and Services (CCIG), the Department of Security & Economy (DSE) and the Office for the Promotion of Industries and Technologies (OPI) awarded the *Prix de l'Économie genevoise* (Geneva Economy Prize) for 2017 to Banque Cantonale de Genève. This prize for the economy and a second award for innovation were created in 2012 to promote and highlight the economic fabric of Geneva. They also seek to honour businesses whose reputation and prestige convey a positive and dynamic image of Geneva. These prizes are traditionally presented at the CCIG Economics Event held every autumn.

In his acceptance speech, CEO Blaise Goetschin said: "If you ask me what has enabled our bank to progress in recent years, my answer would be the trust of our clients. More than 24 billion francs by way of assets deposited with us and over 15 billion in financing for the economy testify to this strong daily link. They also reflect the confidence of our public and private shareholders who have enabled us to invest in the growth and competitiveness of BCGE for tomorrow."

Christophe Weber, new Chairman of the Swiss Chinese Chamber of Commerce





Christophe Weber, Chief of Staff & Planning for BCGE's Executive Board, has taken over at the helm of the Swiss Chinese Chamber of Commerce for a three-year term of office from Blaise Godet, former Ambassador of Switzerland to the People's Republic of China. In his new duties, Christophe Weber has had an opportunity to meet China's Ambassadors to Switzerland and the international organisations. In particular, in October, the bank received a delegation from Tsinghua University. As part

of the doctorate for Advanced Professional Studies in Applied Finance – Specialization in Wealth Management, a delegation of 21 participants consisting of senior Chinese business leaders drawn from various industries took part in a study trip to Geneva, organised by the Geneva Finance Research Institute (GFRI) and the University of Geneva. The bank also co-sponsors the ICL Cup, a two-month summer course in Shanghai where eight students and apprentices drawn from Switzerland are immersed in Chinese culture.

Avantageservice.ch: a first self-service platform

In the run-up to the year-end, the bank has launched an innovative and unique platform on the web: avantageservice.ch which gives universal access to some of the bank's services. With this new functionality, BCGE enables a property financing contract to be arranged and completed in less than 15 minutes, subject to certain conditions. BCGE therefore stands out from many other operators who simply put online exceedingly complex loan-application forms that do not enable a loan to be obtained immediately. An essential range of preferential services will gradually be offered online on the avantageservice.ch site, in particular the finest loyalty programme on the Swiss market, also known as Avantage service which already has a community of 33,000 members. This new distribution channel forms part of the bank's digitisation strategy. It is an additional relay between the network of branches in the canton, subsidiaries in Lausanne and Zurich, and clients. It provides a new ally for the banker. The relationship manager remains in charge of his or her clients, confirming at all times the adage: "I know my banker". There is no question of delegating client relationships to a robot; however, certain algorithms are used to propose a transparent offering, available easily and rapidly.



Economy



Swiss economic prosperity: criteria and challenges?

At the BCGE Essentials of Finance conference held on 20 September (see page 14), Thierry Geiger, Head of Research at the World Economic Forum (WEF) team, explained the risks and dangers – over and above the challenges of the world geopolitical and economic context – which are threatening Switzerland, champion in the competitiveness rankings for nearly 10 years. Built on 12 pillars, this index is an instrument intended for governments, the private sector and civil society, enabling them to work together to advance a country's future prosperity.

Switzerland's trump cards: human capital and innovation

The focus on human capital and innovation has put Switzerland at the top of the WEF's competitiveness rankings. It has become a prosperous country by nurturing, training and attracting human capital dedicated increasingly to high-addedvalue activities. For example, among the 114 countries included in the global competitiveness rankings, Switzerland is No.1 for: the quality of in-service staff training; the quality of its business management schools; flexibility of 'hiring and firing' practices; cooperation in employer-employee relations; quality of research institutions; the ability to attract and retain talent. The focus on talent has endowed Switzerland with an outstanding ability to innovate. Nowadays, innovation is the main source of productivity gains and long-term growth for any advanced country, all the others being gradually exhausted as a nation becomes richer. The number of patents per capita is one of the yardsticks which enable this aptitude to be measured. In 2013-2014, Switzerland ranked third behind Japan and Sweden, but ahead of Finland and South Korea

Dangers and challenges facing Switzerland

However, Thierry Geiger warns against certain risks which might call Switzerland's attractiveness and competitiveness into question. The high cost of living is the greatest risk now that international businesses are constantly asking whether the return on investment, earnings and the advantages of their presence in Switzerland justify the costs incurred. The second risk resides in a creeping populism, which has been particularly apparent in certain popular referendum initiatives. The adoption second time round of a project similar to that of 9 February 2014 in favour of withdrawing into itself and imposing excessive restrictions on movement of people and Switzerland's outwardlooking policy would have disastrous consequences for the country and its ability to attract new talent. The third risk threatening Switzerland is the tendency to become complacent; this is reflected in a degree of self-satisfaction, together with the lack of a will to win and do even better than before. All the stakeholders in society, especially entrepreneurs, must remain enquiring and open-minded, reflect how to improve further or operate differently, anticipate fundamental trends and engage in continuous monitoring of their own competitiveness. The fourth risk confronting Switzerland is a cultural factor: excessive prudence which puts a brake on entrepreneurship. The

"Innovation is the main source of productivity gains and long-term growth for an advanced country."

annual WEF survey of business managers speaks volumes. They are questioned in particular about their perception of failure. Switzerland occupies 31st place in this ranking with a score of 4.4 on a scale of 7, comfortably outstripped by countries like Israel, the United States, New Zealand or the United Kingdom. The fifth challenge is that of demographics which are not particularly favourable to Switzerland. Forecasts show that, by 2060, the country will have one senior citizen for every two in employment; that in turn poses the problem of social policy financing and immigration policy. What is more, Switzerland is lagging behind in the introduction of a family policy adapted to today's needs. Such a policy would enable the presence of women on the labour market - still far too low - to be encouraged.

Government's crucial role

Governments whose role is to ensure stability and predictability for all the stakeholders in the economy must invest nowadays in digital and educational infrastructures if they are to have longerterm effects. The fact is that the educational courses put in place today will train individuals who will be entering the jobs market in 10 to 15 years' time and will need the right skills and qualifications. Moreover, the legal framework must be adapted very quickly to the new models and new sectors emerging in a context of uberisation of the economy. These problems call for a very strong faculty of anticipation, constant monitoring and impressive planning capabilities. In Switzerland, the WEF notes some signs that this groundwork is being done, but efforts must be pursued relentlessly.

Marie Christine Lang

See the BCGE channel on YouTube



Monica Malcarne, Head of the Covance Group's Geneva site

of many thousands of francs on the Geneva site, an outcome that is by no means trivial." Another aspect: to handle the 20% growth in the Geneva-based workforce over the past five years, Covance has increased the number of persons employed in a given working areas by introducing teleworking and smart working. This has been done at reasonable cost and gives employees greater flexibility. "Every application for investment", she concludes, "must be fully justified. So, we must be hyper-productive and continuously improve our processes".

Monica Malcarne heads up the Covance Group's Geneva subsidiary and has 20 years' experience in the field of life sciences and pharmaceuticals development.

See the BCGE channel on YouTube

Competitiveness synonymous with rising productivity

"Remaining competitive in an environment of very high operating costs, as we have in Switzerland, presents a real challenge", Monica Malcarne comments. She oversees the Covance Group's Geneva site. The group is active on the market for developing pharmaceuticals and analyses. She also attended the BCGE Essentials of Finance seminar held on 20 September. To meet this challenge, the Geneva site has invested in such areas as automation of operations. "That has enabled the quality and speed of work to be improved, while redeploying jobs to perform different tasks", she says. The result: a doubling of the volume of work performed per square metre. patients' analysis results available two hours sooner than before, and a 50% reduction in the number of incidents. "In addition, this has enabled us to defer for more than two years an investment

Economy

A utopian dream



The 'Sovereign Money' initiative seeks to give the Swiss National Bank (SNB) a monopoly on money creation. This is an ambitious and unprecedented project. In no other country does a central bank enjoy such a privilege.

This project is also peculiarly utopian. Its adoption would revolutionise the existing banking order to such an extent that there is no possibility of it ever being accepted, let alone put into practice. That said, there is much play on words here: strictly speaking, banks do not create money, but enter into commitments backed by clients' sight deposits that are symmetrical, from an accounting point of view, with loans granted by the banks to those same clients (hence the adage "loans make deposits"). This book money, as it is known for convenience, is not exactly the same thing as the 'real currency', i.e. the central currency consisting of bank notes and coins (as well as giro accounts which might be called the 'central book money') because the latter, issued by the SNB alone, is always an entirely valid means of payment, whereas clients' deposits are not protected against banks' default risk, at least not in full because they are only guaranteed up to a specific amount.

"The very notion of the bank would disappear outright!"

Banking functions split in two

Ousted from the money-creation process, banks would in effect be split into two entities. The first, excised from their balance sheet, would simply manage payments traffic, as deposits would have to be 100% covered by the central currency (hence the expression 'sovereign money'), while the second would take care of credits financed from the bank's own equity, borrowings or other thirdparty funds (including savings deposits which would not be affected by the initiative). In brief, the very notion of a bank would disappear outright, because retail banking would become nothing more than simple fiduciary management of deposit accounts, while the investmentbanking function would in future be equivalent, to all intents and purposes, to that of an investment fund. Bank intermediation as such, namely the conversion of liabilities payable at sight into longer-term assets, would no longer exist!

Money created "with no debt"

But an even more fundamental change would be the conversion of all existing book money into the central currency. Clients' assets would no longer be claims on banks, but would become instead claims on the SNB, which, by the same token, would manage the entire money supply directly and increase (or reduce) that supply depending on the need for liquidity in the economy. This direct control by the central bank over all economic life would give it an overwhelming responsibility whose effects are difficult to conceive in advance. It is even harder to imagine what the consequences might be if the central bank were to bring into additional circulation a currency "without any form of debt", since the bank would acquire no counterparty assets. Some observers suggest that this would be a way of mopping up public debt without any effort (or of cutting taxes or financing investments) if this new money were assigned first and foremost to the State. Dream on...

Marian Stepczynski

Investments

Investora highlights Banque Cantonale de Genève

The 5th Investora Conference was held in Zurich on 20 and 21 September, with over 600 participants attending, consisting mostly of financial analysts, portfolio managers and investors. The CEOs and CFOs of 32 companies listed on the Swiss Stock Exchange, including Blaise Goetschin for Banque Cantonale de Genève, presented their activities and strategic priorities.

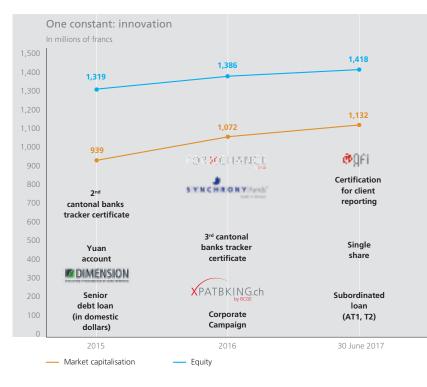


Marc Doerks Finance Chief of Staff & Risk Control

On the occasion of the Investora 2017 investment show, BCGE's CEO explained the many excellent attributes of Geneva and its region which contribute some 25% of Swiss GDP. With an export share of close on 44%, it is one of Europe's most dynamic zones, thanks in particular to the watch and jewellery industry (80%), as well as pharmaceuticals and chemicals (13%). Geneva is also a leader in commodities trade financing (60% of metals, 50% of coffee, and 50% of oil and its derivatives) and ranks No.1 in the production of flavours (70% market share) and in watch industry exports (more than 22 billion dollars). Last but not least, the region running from Geneva in the West along the north side of Lake Geneva, known as the Arc lémanique, benefits from the presence of many research institutes and universities that enjoy international prestige.

BCGE's strategic priorities

Stressing the high level of diversification in the bank's business portfolio, Blaise Goetschin explained the strategic priorities defined by BCGE in its three business areas: individual customers, businesses and institutional clients. To serve the first category, the bank intends to develop private banking (13.4 billion francs by way of assets generated and managed) in four geographical zones (Geneva, Switzerland, France and international) and develop its position in savings and pension plans (5 billion francs) and in private credit financing (4.1 billion francs in mortgage financing). For the business segment which generates two-thirds of the bank's income, Blaise Goetschin drew attention to the bank's determination to retain its leadership on the Geneva construction and real-estate market (3.5 billion francs) and in providing financing for the public authorities. The CEO pointed out that BCGE is the biggest Geneva-based operator in



"BCGE has turned the culture of innovation into a success factor."

commodities financing with exposure of 2 billion francs. He added that the team specialising in bank-to-bank operations has some 400 clients in over 100 countries. Lastly, BCGE plans to increase its market shares in the institutional investors segment (11.2 billion francs) and in that of funds through, in particular, its Synchrony brand with some 2.2 billion francs under management. Blaise Goetschin concluded by highlighting the culture of innovation put in place by BCGE. This has transformed its traditional business model into a modern structure capable of responding to the constant evolution of its business activities.

Investments

The Synchrony LPP 80 B fund imparts fresh dynamism into 3rd-pillar (3a) assets

20 September 2017 saw the launch of the Synchrony LPP 80 B. While complying with the general principles of the Implementing Ordinance on Occupational Retirement, Survivors' and Disability Pension Plans (OPP2), it injects still greater dynamics into 3rd-pillar (type 3a) assets by including a bigger percentage of equities from a long-term perspective.



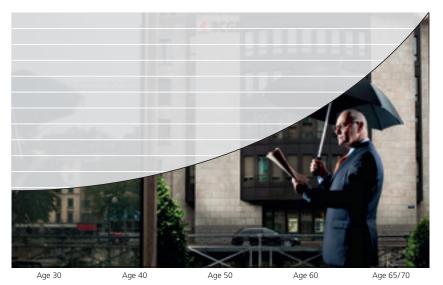
Grégoire Genolet Institutional Manager

This product puts us more in step with the lengthy time-frame of 3rd-pillar tied pension assets (type 3a). It is not unusual for investors who decide to set up a 3a scheme of this kind to have a very long time horizon, perhaps as long as 40 years. This environment is conducive to investing in equities, which calls for patience. As its name implies, the fund will be allowed to invest up to 80% in the shares of leading global companies.

Solidity, permanence and long-term value creation

The fund invests up to around 55% in Swiss equities, up to 25% in international equities, and in top-grade global bonds. With a view to honouring the obligation of not exceeding 30% in foreign currencies and given the rockbottom yields on bonds denominated in francs or euros, the segment invested in international bonds will be hedged against foreign-exchange risk.

Very broad management diversification is assured with the presence of several dozen Swiss equities selected by BCGE Asset Management and several hundred international equities selected on proven open-architecture principles. Depending on what happens on markets, the fund may also invest in bonds denominated in francs and in Swiss real estate.



A 3rd-pillar (3a) scheme enables long-term growth in pension savings

Confronting market phases with confidence

The Synchrony LPP 80 B fund is intended for investors with a long investment horizon of 10 years or more who are convinced of the pertinence of making continuous investments in the world's finest businesses over a lengthy period to capture the performance of the real economy. That is a cornerstone of BCGE's investment philosophy.

This product takes on board the bank's pension savings plan programme which enables those insured with BCGE's *Fondation 3a* scheme to build up pension savings by making regular monthly payments. The virtues of investing regularly have been clearly illustrated by financial theory: regular instalments makes it easier to generate capital growth and evens out unpredictable market phases over time.

As is the case with all Synchrony LPP funds, if something happens that calls for an occupational benefit to come into play (retirement, departure abroad, etc.), the insured person can remain invested in the same portfolio simply by transferring from unit class B to unit class A at no cost.

This article does not constitute an offer, solicitation or recommendation to buy or sell the financial securities to which reference is made. Nor is it intended for people who come under the jurisdiction of a State whose current laws or regulations prohibit access to such information. Past performance does not guarantee favourable future performance.

"The new Synchrony LPP 80 B fund enables companies' long-term stock market performance to be captured more effectively for those insured with BCGE's *Fondation 3a* scheme."

From artificial intelligence to enhanced human intelligence

Joël de Rosnay Futurist and prestigious scientist specialising in biology and informatics

At the BCGE Essentials of Finance conference held on 22 September (see page 14), the scientist and futurist Joël de Rosnay talked about the disruption generated by the digital revolution. The world has entered a new ecosystem in which processes are being accelerated by constant interfaces between man and machine. By clicking into the digital environment, man gains in stature and accesses what Joël de Rosnay calls 'enhanced human intelligence'.

Joël de Rosnay defines the digital revolution not only as the use of digital tools, but also as the emergence of a new ecosystem where man remains permanently connected. The fact is that he is communicating increasingly with machines as he does with persons, because machines have gained the ability to understand words, gestures and even emotions. Moreover, these digital objects are not only portable, but also wearable and integrated, like a connected watch, which enables a great deal of information about our health to be captured. The best-known interface is the smartphone which is not only a communication tool and additional memory, but also a universal remote control enabling us to click onto intelligent environments consisting of interactive, proactive objects in real time and at connected places. Thus, man today has acquired more meaning than when he was born: a universal presence thanks to webcams or guidance by GPS.

Dangers of artificial intelligence

Microsoft founder Bill Gates, astrophysicist Stephen Hawking and entrepreneur Elon Musk take the view that artificial intelligence must be repressed and controlled, because, otherwise, it might come to dominate mankind. They have called upon governments to devise solutions to prevent total invasion. According to Ray Kurzweil, a transhumanist working at Google, the world will, in some 50 years' time, reach what he calls the point of singularity from which machines connected together globally will dominate mankind and turn human beings into slaves. Joël de Rosnay takes the view that artificial intelligence is not something to be feared, but must be harnessed in such a way as to enhance man. However, it might present a danger to the future of the intellectual professions: managers, barristers, lawyers, doctors, journalists, professors and consultants. These white-collar professionals do jobs that might be replaced by artificial intelligence if they do not learn to employ this themselves to advance still further and transform their own activities and professions.



The advent of collaborative intelligence platforms

The implications of the digital revolution are bound to disrupt traditional businesses, especially those which are too slow, lacking in transparency, hard to access or too expensive. By 2030, they are at risk of being uberised, i.e. overtaken by new services exploiting digital means to bring supply and demand together far more quickly. The new generation of disruptive businesses represented by Uber, Instacart, Alibaba, Airbnb, Netflix, Twitter, WhatsApp, Facebook or Google is experiencing the fastest growth rates in history. They have put in place a new model consisting of thin layers superimposed on vast distribution systems where costs are generated to interface, thanks to their algorithms, with a multitude of persons who have access to money. These businesses have created the possibility of shortcircuiting highly expensive big services to interface directly with their clients. Uber, the world's biggest taxi business, for example, does not own a single vehicle; Facebook, owner of the world's most popular medium, creates no content; Alibaba, the world's biggest e-commerce group, has no stock; Airbnb, the biggest supplier of accommodation in the world has no real estate of its own. These groups have become collaborative intelligence platforms by setting up a new model based on disintermediation. Clients and users now contribute to creating added value.

The danger of the digital monopoly

Joël de Rosnay warns against the digital monopoly phenomenon represented by businesses like GAFA (Google, Amazon, Facebook, Apple) or NATU (Netflix, Airbnb, Tesla, Uber). The dependence generated by these enterprise-states whose stock market capitalisations and cash resources are equivalent to the total wealth of some countries is very hard to combat. Governments with their pyramidal power structures have few resources to resist these digital giants. The only way of doing so resides in what Joël de Rosnay calls participative citizens' coregulation which has its roots in the transition from an information society to a society based on sharing and recommendation. In his view, collective intelligence linked up by social networks could turn out to be an effective counter-power.





Susan Greenfield spoke to the conference on the topi The brain of the future, silicone or plastic?

Will artificial intelligence revolutionise the economy?



From left to right: Claude Bagnoud, Member of BCGE's Executive Board and Head of the Geneva Private Clients and Family Businesses Division; Laurent Alexandre, surgeon, entrepreneur and expert in artificial intelligence; Sébastien Collado, Deputy Director and Head of BCGE's SMEs and Self-Employed unit "These white-collar professionals do jobs that might be replaced by artificial intelligence if they do not learn to employ this themselves to advance still further and transform their own activities and professions."

Work for robots and living for mankind

In the optimistic vision of the future propounded by Joël de Rosnay, artificial intelligence, clever use of robotics and symbiosis with a digital ecosystem will release man from all kinds of material constraints. He will then be able to achieve enhanced individual and collaborative intelligence and dedicate his life to human and social contacts. According to Joël de Rosnay's theory, if man knows how to live in symbiosis with artificial intelligence, he will be able to achieve what he - rejecting the egotistic, elitist and narcissistic ideology of transhumanism calls 'hyper-humanism'. This collective approach will enable him to give meaning to his life by developing essential qualities fraternity, love, generosity, solidarity, empathy, altruism - which are potentially present in his brain, but inhibited today by competition and permanent confrontation. Mankind will then be able to build a collective future of its own choosing and not one that is imposed or suffered.

Marie-Christine Lang

See the BCGE channel on YouTube

Laurent Alexandre, a surgeon, entrepreneur, expert in artificial intelligence and author of La guerre des intelligences ("The War of Intelligences") and La mort de la mort ("The Death of Death") announces the advent of a dictatorship of intelligence, in which the least gifted will have the most to lose and will be unable to earn decent salaries. Laurent Alexandre also addressed the BCGE Essentials of Finance 2017 lecture cycle. "Artificial intelligence is an extraordinary machine to create populism," he explains. It will modify and bring on a new form of zero-cost working in relative value against the biological brain. Confronted with this finding, education and the professional system must be reformed to ensure the complementarity of workers with low artificial intelligence. Future training must be geared to the brain and no longer to knowledge. Artificial intelligence will set off a cerebral war with risks of 'platformisation', neurohacking and 'demiurgisation' ('God the Creator' syndrome), Laurent Alexandre explains.

Businesses like Google, Amazon, Facebook and Apple capture the bulk of capital and remuneration. Where does their strength lie? In their ability to control artificial intelligence thanks to their millions of users who, by sharing billions of photos, educate the artificial intelligence of these platforms. "There is a bonus for the biggest in this field where Europe has already been overtaken," Laurent Alexandre points out. "This scale of artificial intelligence means that small businesses must be vigilant by surfing innovations."

This new environment poses a series of questions: Can there be a political response to this imminent modification of the economy? How are regulation, governance and the 'policing' of weak artificial intelligence to be organised? How can we respond to these challenges of economic, educational and training sovereignty? How can neuro-eugenics be avoided?

See the BCGE channel on YouTube

SERVING BOTH GENEVANS AND VISITORS TO GENEVA

A BETTER WELCOME TO GENEVA WHILE EASING THE PROFESSIONAL REDEPLOYMENT OF DEDICATED PERSONS. THOSE ARE THE CHALLENGES TAKEN UP BY THE *BIENVENUE* (WELCOME) ASSOCIATION.



The *Bienvenue* Association provides an information and guidance service to give visitors a better welcome to Geneva. The originality of this approach lies in the fact that the association employs people whose entitlement to unemployment benefits has come to an end. It offers them training and enables them to find their way back to the normal jobs market. Known as 'urban stewards', these staff members have become professionals in welcoming, guiding and advising visitors.

The Association seeks to provide a varied job for urban stewards, enabling them to develop their employability. The Association's main clients are the CFF, the TPG, SIG, the State of Geneva and the City of Geneva. Urban stewards are given a remit for short or long-term tasks. The experience of a Peruvian delegate who came to Geneva for a UN Conference testifies to the multiskilled qualities of the Bienvenue team. "When I arrived in Geneva, I was warmly welcomed at the airport by an urban steward. He gave me useful information for my stay. The next day, the same steward told me about public transport services during the Music Festival. He was stationed near the Parc des Bastions to give people information about transport (on behalf of the TPG, Geneva's public-transport operator). Two days later, I went to the railway station to buy a train ticket to Paris. I came across the same steward again! This time he was working for the CFF, the State railways, to make buying a ticket easier. I am infinitely grateful to him for all this unexpected help!"

Their helpful attitude and detailed knowledge of the city convey a very attractive image of Geneva. By supplementing the work of Geneva Tourism, the presence of urban stewards on site gave more than 154,000 persons the benefit of their useful advice in 2016.

The Association employs some fifteen staff who are being redeployed on the jobs market. They all benefit from personalised follow-up leading them back to the normal labour market. Some attend training courses, while others benefit from coaching hours. The commitment charter developed by the Association enables objectives to be defined with each individual job-seeker.

The results are positive and encouraging for the team: 25% of all the staff members found a job on the normal jobs market in 2016.

The Association is chaired by Raymond Wicky, former Commander of the City of Geneva Fire & Emergency Service (SIS), while the Committee consists of representatives of NODE (New Organisation of Entrepreneurs), the CFF, the TPG, the Economic Promotion Department and Palexpo.

Bienvenue Association

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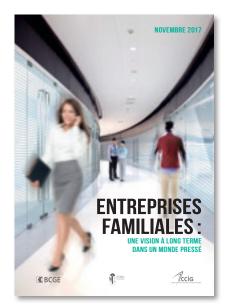
Focus on a study Family businesses: a long-term vision for a world in a hurry

Often discreet, family businesses are taking centre-stage once again and constitute the backbone of most economies worldwide. In Switzerland, roughly three out of four companies are family-owned. Although they may take many different forms, ranging from micro-firms managed by their creators to a multinational group that has survived down the centuries, these companies share the same DNA, consisting notably of a long-term vision, a desire for independence and pragmatism.

A study published recently by BCGE, CCIG and OCSTAT paints their portrait, highlighting their features, strengths and weaknesses. *Entreprises familiales: une vision* à *long terme dans un monde pressé* (*"Family businesses: a long-term vision for a world in a hurry"*) also reviews the key elements of good practice, including such matters as relationships within and beyond the family, management and succession. It also looks at ways in which family issues and strategic challenges can be reconciled, innovations made while respecting tradition or the business opened up to newcomers while retaining control. In brief, it sets out to help consolidate these firms so instrumental to the economic prosperity of French-speaking Switzerland.

YAZGI Aline, 2017.

Entreprises familiales: une vision à long terme dans un monde pressé. BCGE, CCIG and OCSTAT. **www@bcge.ch**



A book worth reading An operator's handbook to wealth management

Investir dans l'économie, pas en bourse ("Investing in the economy, not on the stock market") is nothing short of a veritable guide to operational wealth management. Co-authored by Blaise Goetschin and Constantino Cancela, this work surveys the fundamental principles which underlie every investment. It informs the reader how to steer clear of irrational reactions of financial markets over the short term and proposes a straightforward, pragmatic road-map for wealth management. This guide is built up around a central recommendation: the need to adopt unremittingly a critical approach towards 'dominant financial thinking', fuelled by purely quantitative financial theory, fashion or aggressive financial marketing. The guide provides many useful points of reference for investors wishing to operate with rationality and effectiveness. Above all, it stresses the importance of long-term investing. Only over a long-term time-frame can stock-market valuations properly reflect economic fundamentals which are the sole true value creators. Over the shorter term, markets are known for alternating of phases of undershooting and overshooting in reaction to information and rumours of all kinds. With a preface written by Mickaël Mangot, an economics professor and lecturer at ESSEC Business School (Paris) and an expert in behavioural finance, this guide, a pocketsized handbook for investors, advocates spreading wealth over the broadest possible horizons, extending beyond familiar assets alone. While efficient diversification is a wellknown principle, it can only be implemented successfully with method and persistence. Those two attitudes are advocated by the authors with a view to achieving not only high, but also regular returns.



CANCELA Constantino & GOETSCHIN Blaise, 2017. Investir dans l'économie, pas en bourse Éditions Favre

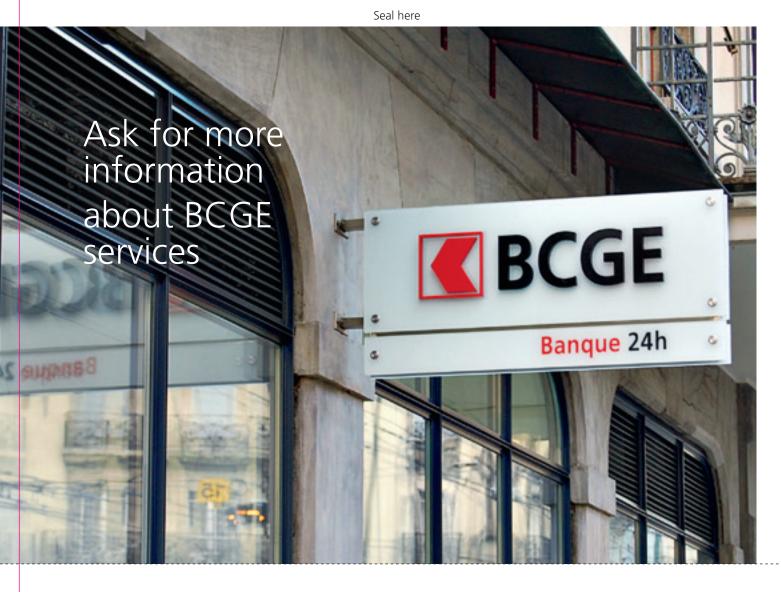
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BCGE also has 20 other branches in the canton

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