EUROPE'S TECH AWAKENING

All investment strategies have the potential for profit and loss, your or your clients' capital may be at risk. Past performance is not a guide to future returns.

The past two decades have witnessed the meteoric rise of the tech giants. Their impact on our lives and on stock markets has been vast. Innocuous-sounding acronyms like FAANG (representing Facebook, Amazon, Apple, Netflix and Alphabet (formerly known as Google)) and BAT (covering Baidu, Alibaba and Tencent) have come to represent hundreds of billions of dollars of value in the US and China respectively. Europe, in contrast, has been relatively barren. When it comes to digital platforms, Europe just hasn't kept pace. It is time, however, to draw a line in the sand. The future is far brighter than the recent past. Europe's tech awakening is well underway, and we think the vibrant tech landscape now flourishing across the continent foreshadows a much richer chapter for the European investor.



THE PAST

Despite having built global tech giants, such as SAP and Nokia, in the not too distant past, European tech has been in the US' shadow for the past decade. The US-Europe divide is perhaps best summed up by a single, astonishing observation: the US tech sector is now worth more than the entire European stock market.

So, what's gone wrong? We think that there have been three principal obstacles.

First, Europe has lacked capital. Even the brightest minds with the biggest ideas need money to turn their dreams into reality, but Europe has been perennially starving its entrepreneurs. In 2016, for example, the European Commission (EC) reported that venture capitalists invested just €6.5bn in European start-ups compared with €39.4bn in the US. The European Innovation Council recently delivered a damning verdict, describing the European venture capital market as "underdeveloped by comparison at all stages: inception, development and scale-up, seed-capital, start-up, and later-stage development funding."

Capital has been in short supply, but supportive mindsets have also been difficult to find. In other words, Europe has lacked investors who understand tech. This was perhaps best summarised by complexity economist W. Brian Arthur who has helped develop the theory of increasing returns to scale. In a podcast two years ago, he shared his view that Europeans just hadn't grasped the importance of building big user bases to the same extent as their peers in Silicon Valley. By being far too focused on short-term profitability they missed opportunities and were overtaken by competitors who better understood that growth at any cost could lead to eventual winner-take-all economics.

Finally, ambitions have tended to be quite narrow. A lack of capital and supportive investors have both played their part, but the absence of role models and Europe's failure to build thriving tech ecosystems probably matter too. Silicon Valley's role as the western world's epicentre of tech innovation was established long ago, underpinned by a self-reinforcing virtuous circle as it became 'the place to be' for software engineers and entrepreneurs alike. Success begot success, and it became an environment well-suited to supporting big ambitions. As Daniel Ek, founder of Spotify, recently noted, Europeans are still hesitant to take big risks.

But that was yesterday. Change is afoot. Europe's caricatured vignette – bureaucratic, slow-moving, uninventive – has been difficult to shrug, but it is becoming increasingly outdated. A widespread tech renaissance is unfolding, heralding a new frontier of exciting opportunities. Investors who remain glued to the old portrayals of Europe risk missing out on some of the big future stock market winners, not just in Europe, but in the whole world.



"I'm always amazed and slightly appalled that people think of technology in Europe as something that's done by very big companies and it's pretty good technology, but they don't get that this is a game of positioning of building the user base... it's well understood in California, it gets less well understood on the east coast, and then not very well understood elsewhere."

PROFESSOR BRIAN ARTHUR

THE PRESENT

The foundations have been laid for European tech to flourish long term as never before. Capital is available in large quantities, increasingly coming from patient, supportive investors who understand the challenges of building tech winners. This powerful combination is fostering a wave of European entrepreneurs ready to take on the world.

First, capital. The past six years alone have witnessed more than a thirteen-fold increase in the amount of equity raised by Europe's tech ecosystem, a colossal \$40bn that dwarves the \$3bn raised in 2014. There's also been a near fourfold increase in the number of European tech unicorns (companies worth more than \$1bn) and more than a fourfold increase in the number of companies valued \$5bn and above. Even the European Commission has realised the need for money, setting up the European Innovation Council in 2017 with the explicit goal of making approximately €3bn of funding available to 'the most talented innovators to help their companies scale up and expand beyond European borders'.

Europe's Transforming Tech Ecosystem



Source: GP Bullhound, Capital IQ, Mergemarket. Pitchbook and Crunchbase. Equity funds raised refer to capital raised through primary equity offering. Cut-off date for inclusion in report 31 March 2020; valuations correct as at 14 May 2020.

Much of this new capital is being managed by investors who 'get tech'. As well as those who have come over from Silicon Valley, there are native European venture capitalists hunting for the next big winner. This is a boon for European tech CEOs and founders looking for supportive, long-term shareholders willing to provide capital to help them build a competitive advantage. The popular paraphrase of Buffett's 1979 letter that suggests managers get the shareholders they deserve appears to be coming true for European tech businesses, which for years have had to deal with short-term shareholders who just didn't understand how to build.

What matters most is the transformation in ambitions. The thriving tech ecosystems in various European cities – from Paris to Berlin to Stockholm – have provided nurturing environments that allow entrepreneurs to aim high. And aiming high they are. Spotify's Daniel Ek is taking on American giants Apple and Amazon in music streaming. He is winning the battle for subscribers with over 130 million paying subscribers, more than Apple and Amazon combined. Classifieds marketplace operator Adevinta – which runs several real estate, car and job marketplaces around Europe – is about to become the largest in the world as it digests eBay's classifieds division. Then there's Jitse Groen, the ambitious founder of Dutch online food delivery business Takeaway.com, which recently merged with the UK's Just Eat. He is currently in the process of trying to acquire American peer Grubhub, a deal that would crown Just Eat Takeaway as one of the biggest online food delivery businesses in the world.

"My selfish ambition with Spotify is just trying to show... that we can create one of those super companies here in Europe."

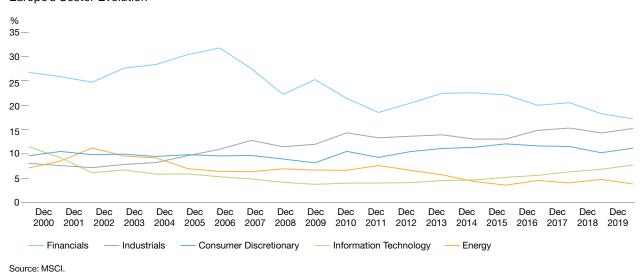
DANIEL EK



The invigoration spurred by changes is truly momentous. In Berlin, for example, a start-up is apparently founded every twenty minutes. Even Lithuania, one of the EU's smallest economies, recently produced its first unicorn (a second-hand marketplace called Vinted).

The index has begun to change too. The old characterisation of the European stock market – dominated by banks, energy companies and a raft of zombie companies kept alive by governments and low interest rates – is no longer tenable.

Europe's Sector Evolution



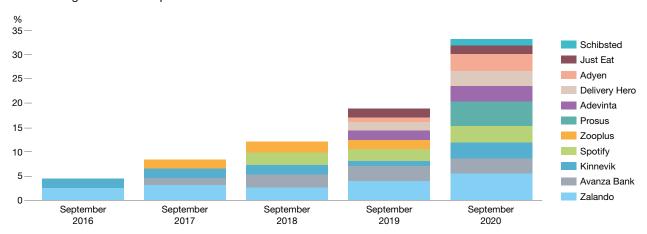
So, what are we, as investors, doing about all this?

Ten years ago, our portfolio looked very different. Our top holdings included Scandinavian banks like Svenska Handelsbanken and Jyske Bank, consumer goods purveyor Nestlé, oil major Total, and Swedish industrial Atlas Copco. We held compounders aplenty, but virtually no transformational growth companies, particularly the tech platform-type businesses that were flourishing in America. We were limited by the opportunity set available to us at the time.

The opportunity set is now much broader, and we're in a better position to access it. Europe's flourishing tech landscape has birthed a flurry of successful companies that have come to market and now boast market capitalisations in the tens of billions. These include Zalando, Takeaway.com, Delivery Hero, and Spotify, but there are plenty of others. Corporate activity has presented further opportunities. Adevinta, for example, was spun out of Norwegian media business Schibsted last year. Then later in the year South African media conglomerate Naspers spun out its international internet businesses in the form of Amsterdam-based Prosus. Naspers – via Prosus – owns about a third of Chinese gaming and social media business Tencent, having invested \$32m back in 2001. That stake is now worth over \$190bn.

Our portfolio today reflects this richer opportunity set. The proportion of our portfolio invested in tech businesses has risen fivefold over the past five years, and spans online food delivery, classifieds marketplaces and more.

Portfolio Digital Platform Exposure



Source: Baillie Gifford & Co. Based on a representative European portfolio.

Most of these businesses are built upon the same sort of network effects that propelled Amazon to dominance in ecommerce. The basic idea is that something becomes more valuable as more people use it. In Amazon's case, its growth in sellers meant more choice, which encouraged more buyers to use the platform, which in turn encourages more sellers to sign up and so forth.

The presence of these positive feedback loops helps tech companies scale quickly – many of the big tech winners have benefited from them. With Europe finally understanding how to harness their power, the chances of producing some of our own global champions have surely risen.



THE FUTURE

Progress is difficult to see in public markets. Companies are staying private for longer, partly because they need less capital in aggregate than they used to, and partly because the short-termism and hostility of today's public markets incentivise them to remain behind the curtain where they're better able to influence their shareholder registers. For that reason, hugging the index is an even more flawed strategy than usual.

We think we're well-placed to find many more of these opportunities. Our long-term mindset is well-aligned with early-stage companies whose founders need patient capital to build tomorrow's big winners. We're also fortunate that Baillie Gifford has built a strong capability and good reputation for investing in private companies, which positions us well when these companies do decide to list. So we are sure that the team will be having a great many more conversations with private companies, gaining insights that benefit all our clients.

To say that we're optimistic about Europe's future would be an understatement. This is Europe's moment, and we've never been more excited.

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