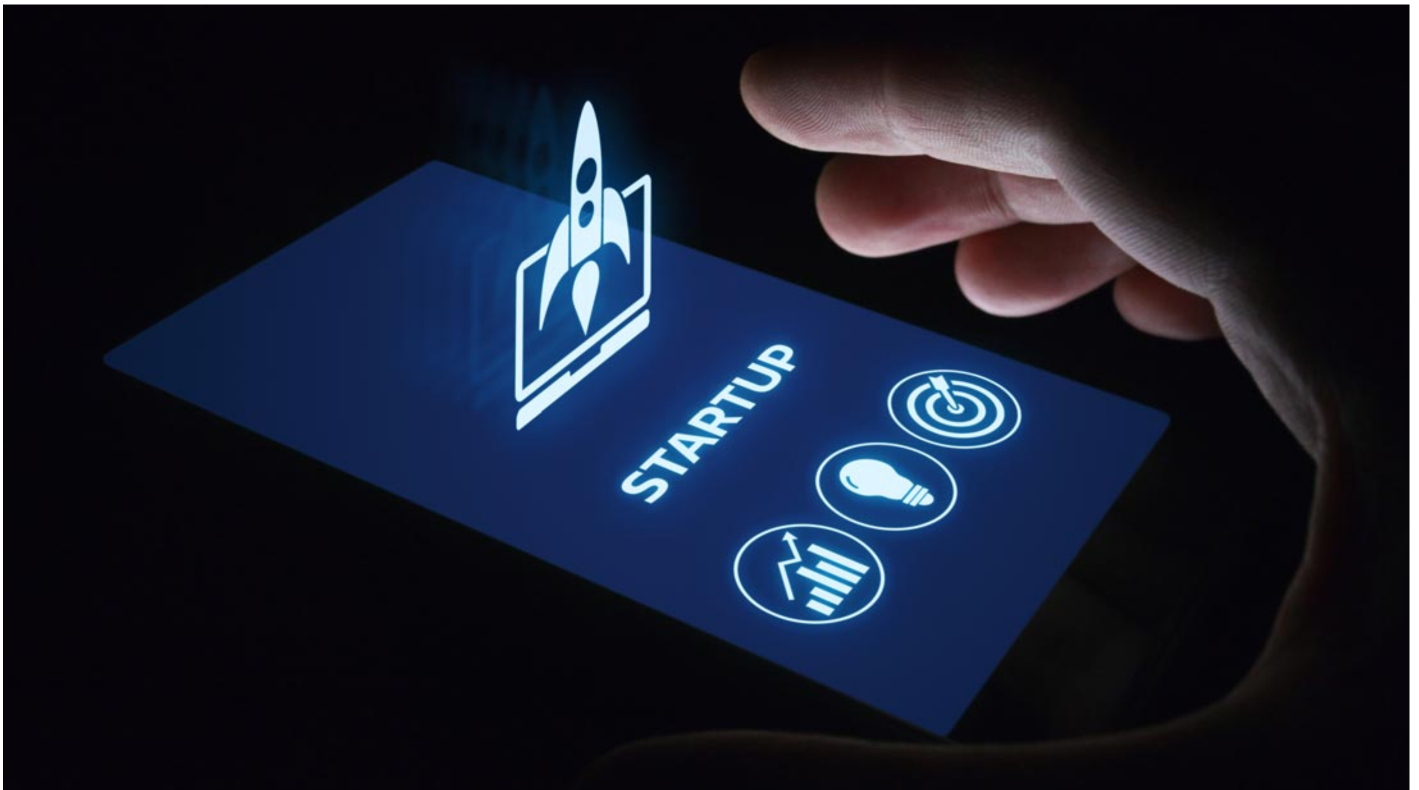

The role of finance in creative destruction

Innovation means change. Professor of Economics Christian Keuschnigg discusses how venture capitalists and banks facilitate the process of creative destruction and steer capital towards a more productive use

Innovation drives growth. New products and services replace old ones. Creative destruction can raise productivity only if capital and labour are reallocated. Less productive firms must exit and release resources for better use in new ventures. Venture capitalists, private equity and banks are the pilots in steering capital to new uses. How does that work?

The start-up problem

Large corporations invest the lion's share of private R&D. They must innovate to stay in the lead. However, per Euro invested, young firms seem to be more successful. They are less prone to think along existing business lines and more eager to pursue radically new solutions. Incentives might be better in small teams.

The most successful start-ups rapidly scale up to become the next generation of business giants. Several stumbling blocks - or 'market failures' - are lurking on the way. Being new in the game, they tend to lack entrepreneurial experience and are prone to management mistakes. Since new ideas are not yet tested by the market, business risk is extremely high. Start-ups could not yet accumulate collateral that would allow banks to give credit. Many of the most promising ventures might not exploit their growth potential or not even get started.

The venture capital solution

Venture capitalists (VCs) can help to overcome these problems. VCs are specialised in financing the riskiest but most innovative start-ups with the largest growth potential but little own resources. Given high risk, they must intensively screen business plans and may select only up to five out of a hundred proposals. They supply risk capital by acquiring big chunks of equity shares. Banks, in contrast, must limit their risk exposure to safeguard the depositors' money and could not extend credit if firms lack risk bearing equity capital. They typically offer co-financing only when a VC is invested in the venture and is monitoring and advising the firm.

By screening business proposals and creating access to financing, VCs play an important role in steering capital to the most profitable uses and thereby contribute to productivity growth. On top of securing access to finance, VCs

provide oversight and control, and offer strategic advice to compensate for the lack of entrepreneurial experience of the newcomers. They create value by speeding up the professionalisation of firms and preventing avoidable failure. By investing a large share of equity, they share in the firms' upside potential. They are keen to push for speedy market introduction and an aggressive innovation and growth strategy.

For these reasons, VC backed firms are typically more innovative and more profitable, grow larger and create more jobs than comparable other firms. In identifying and scaling up the most promising start-ups, VCs help to create the next generation of business giants.

Venture capital is only a small part of the financial sector but is disproportionately important for innovative growth. VC complements the role of banks which provide the bulk of business financing. The need for intense screening and managerial support makes VC an expensive source of finance compared to bank credit. It is thus viable only for the riskiest but most innovative and profitable start-ups. It is particularly important in the earliest and riskiest phase of business growth when bank credit is often not available. When firms grow older, get more experienced and have more collateral, the relative advantage of VC shrinks. Banks and other investors can step in to provide financing. Typically, VC firms exit after five to ten years to reinvest capital in the next wave of start-ups.

The role of bank financing

Banks finance the bulk of mature firms: risk is much lower, and firms can offer collateral. Compared to VC, bank monitoring is more standardised and less intensive. In offering credit contracts at the going loan rate of interest, they cannot participate in the upside potential of firms. They have thus little incentive for value creation beyond ensuring safe credit repayment. Banks finance a much larger number of relatively safe firms.

Still, many things can go wrong. Firms are constantly challenged by the entry of new competitors. They might neglect R&D to improve their product lines. When losing their competitive advantage, such firms are neither able to earn a normal return on capital nor can they offer good wages and career prospects. Firms have a natural tendency to keep going and to hope for a turnaround. Productivity declines when capital and labour are locked into unproductive uses.

When too many loans become 'non-performing', the quality of the credit portfolio deteriorates. Banks should continue credit lines when difficulties are only temporary. If firms are no longer competitive, it is better to liquidate them and sell the good parts to rivals which make better use of capital and labour. To do so, banks need strong equity buffers that allow them to digest liquidation losses. They can typically extract about 70% of the credit value and must write off the rest. In liquidating non-performing loans, they can reallocate more credit to other firms with better prospects. If banks are not alert, too many 'Zombie' firms might survive and lock up resources in unproductive uses.

Policy initiatives

The innovation cycle has two ends, business creation and destruction. Both are important determinants of productivity growth. Venture capitalists, private equity and banks complement each other. A range of policy initiatives could facilitate the process, e.g., excellence in basic research and fostering entrepreneurial spirits in universities to get more technology start-ups; reforming bankruptcy law for a less wasteful liquidation process and giving entrepreneurs a second chance; or reducing tax and regulatory barriers to invest in risk capital and ending the tax bias in favour of debt financing. Removing stumbling blocks in the process of creative destruction could boost the economy's potential for innovation, change and productivity growth.

References

Egger, P., Keuschnigg, C. (2015), Innovation, Trade and Finance, American Economic Journal: Microeconomics 7, 121-157.

Keuschnigg, C. (2004), Venture Capital Backed Growth, Journal of Economic Growth 9, 239-261.

Keuschnigg, C., Kogler, M. (2020), The Schumpeterian Role of Banks: Credit Reallocation and Capital Requirements, European Economic Review 122, 103349.

Christian Keuschnigg
Professor
University of St. Gallen
Tel: +41 71 224 3085
Christian.Keuschnigg@unisg.ch
www.fgn.unisg.ch/keuschnigg