

establish themselves and build a stronger position in the market. As new firms and new products are introduced into the market old ones disappear, and in the background capital and labour needs to be re-allocated, a topic at the heart of Professor Christian Keuschnigg and Dr. Michael Kogler's research. "We look at the challenge of resource turnover," they explain. The focus here is on investment financing, in particular the re-allocation of investment funds, and the issues around moving finance to faster-growing firms. "There are profitable and less profitable investments," says Professor Keuschnigg. "In the latter case, the entrepreneurial interest may be to continue with the investment, because a bank has a lot of sunk costs, even though in economic terms it may be better to remove the finance and allocate it to a fastergrowing firm."

## **Re-allocating finance**

This is partly because of the frictions involved in re-allocating finance. In a case of bankruptcy for example, a bank may be able

eat into their equity capital.

"This is a very important mechanism. When banks have too little equity, they find that they can't absorb losses any more. In that case, they may want to avoid liquidation losses," says Dr. Kogler. This however has wider economic effects, as finance doesn't flow to the more profitable companies, limiting potential productivity gains. "If the average rate of return on capital is 8 percent, but some firms earn only a 4 percent return, then they clearly don't represent a good investment," points out Professor Keuschnigg. "In that case the capital or credit should be moved to firms which generate a higher return - so they generate more income and value for society."

The danger to a bank in continuing to finance an unprofitable firm is that interest payments and the debt will eventually not be serviced, leading to an increased risk of bankruptcy. There is a clear incentive for a bank to shift capital from high-risk firms to more profitable companies which have better prospects of repaying a loan, which Professor Keuschnigg says can boost the wider economy.

channelled to less technologically advanced sectors," he outlines. This is part of what the Austrian economist Joseph Schumpeter described as the 'creative destruction' of the market, as investment is targeted towards more productive activities. "Creative destruction is always going on. The nature of innovation means that new products and firms expand very fast," continues Professor

Many of the more innovative areas of industry are characterised by rapid product turnover, as advances in research are translated into technical improvements. A country with institutions that can effectively Many European governments are aiming to encourage technical innovation in the private

sector, an area of great interest to Professor Keuschnigg. "Our message would be that innovation policies are more effective if the re-allocation in the background functions better. You can have the best innovation policy, but if old products don't disappear, then the workers and capital are locked into old products." he outlines.

This leaves little room for innovative firms to expand and develop new products which can lead to productivity gains, boosting the wider economy. If banks do not have the capacity to write off less well-performing loans, which are not generating value for society, then this limits their ability to direct finance to more profitable activities. "The ability to write off nonperforming loans enables the flow of savings and investment funds to expanding firms. If they are not released from old uses, then these funds cannot flow to expanding firms," explains Professor Keuschnigg. One part of the project involves developing an endogenous growth model to describe this process of reallocating finance to fuel innovation, looking at the role of banks. "Banks have deeper expertise in risk assessment and risk analysis. They can assess a project's likelihood of success and closely monitor the borrowers after granting loans such that they quickly learn once a firm's prospects deteriorate," outlines Dr Kogler, a post-doctoral researcher at the University of St Gallen. "However, banks need to have the capacity to deal with the losses and write-offs when terminating loans to poorly performing

prove profitable however, and commercial fortunes can change relatively rapidly. "A firm may lose its competitive advantage. At that point, it doesn't make sense any more to fund these firms, so a bank may decide to withdraw a loan when the credit is not safe." savs Professor Keuschnigg.

There is a difficult balance to strike here between supporting businesses in the short-run and avoiding mass unemployment, while also preventing resources from being locked into unproductive uses. If banks don't remove finance from unprofitable companies this can have wider economic effects, as illustrated by the example of Japan. Following a period of strong growth, it suffered a decade of stagnation during the '90s due to debt overhang and unresolved bad loans. "Researchers calculated that the Japanese economy suffered from reduced investment over 10 years, amounting to the magnitude of one year's total investment in the economy," outlines Professor Keuschnigg.

Policy-makers today of course want to avoid these kinds of problems, but they face some hard choices. "If you allocate labour and capital to the most productive uses, the other side of the coin is that you have to cut them from unproductive uses, and this is very painful for policy-makers," points out Professor Keuschnigg. Putting a firm into bankruptcy is often met with political resistance, since it is commonly assumed that all the capital is lost and all workers are unemployed as a result. However, in fact about 30 percent of the capital is actually

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they don't represent a good investment. In that case the capital or credit should be moved to firms which generate a higher return – so they generate more income and value for society.

# Role of banks

The role of banks here is to identify those firms that have the best prospects of generating profits, and then extend finance towards them, while withdrawing capital from those firms that are at higher risk of not being able to repay a loan. Analysis of a firm's finances is a major factor in the initial decision on whether to extend credit to a company, and Professor Keuschnigg says a bank will not loan money to an over-indebted company, or one with a bad business model. "The credit is not safe there, it is clear that it will lead to losses. That's why a bank has to scrutinize a company closely before they extend credit," he outlines. A bank cannot guarantee that every loan it extends will

lost following a bankruptcy, and Professor Keuschnigg says that some of the workforce may be able to find a new job fairly quickly. "The bankrupt firm's rivals can make good use of this labour, and they may come in and make offers," he explains.

An effective legal system that facilitates a smooth bankruptcy process can help ensure that less resources are wasted. "It's important to have clear rules about the bankruptcy process, so that more resources can flow to more productive uses," stresses Professor Keuschnigg. "Similarly with labour. If you don't want to allow unemployment to happen when a firm is unprofitable, then you end up locking them into bad jobs, and that's not in the interests of workers."

# BANKS. REALLOCATION. AND ECONOMIC **PERFORMANCE**

Banks, Reallocation, and Economic

Project Objectives
Providing credit at low interest cost is a key function of banks. By carefully selecting and monitoring projects, banks direct credit to the most promising investments and deny financing of unviable projects. By liquidating non-performing loans, they extract substantial liquidation values and use these funds to lend to more promising firms. In reallocating credit from low return to high return projects, banks help to boost capital productivity and long-term growth.

# **Project Funding**

Funded by the Swiss National Science Foundation, project no. 100018\_189118.

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support this process of re-allocating capital and labour to productive activities will be well-positioned for growth in these innovative sectors of the economy, believes Professor Keuschnigg. "They will have a better environment for the innovative sector to expand, and for the overall economy to specialise in these sectors," he says.

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