
Detrimental Collaborations: When Two Isn't Always Better Than One



By Michaël Bikard , INSEAD; Keyvan Vakili , London Business School; and Florenta Teodoridis , USC Marshall School of Business

Receiving outsized credit can encourage individuals to work together even when it results in lower-quality output.

Collaboration has become an important feature of various industries, particularly when it comes to creative work. This comes amid growing interest in non-hierarchical structures with autonomous teams and the increasing prevalence of open innovation.

The benefits of collaboration – be it leveraging specialised expertise, sharing resources or allowing people with different skills and perspectives to learn from each other – have been widely discussed. On the flip side, collaboration can sometimes yield less-than-desirable effects including groupthink, free riding and conflict among collaborators.

Prior research has been generally optimistic about collaborative work, with the idea that individuals collaborate because it tends to increase output quality, despite the costs. This argument hinges on the implicit assumption that people prioritise work quality and that firms can rely on individuals to

self-assemble into teams with the intent of maximising the quality of the output.

However, when deciding to collaborate, individuals also consider the credit they will receive for their contribution. To study this, we examined situations in which these objectives don't necessarily align, and when the choice to collaborate based on the credit obtained can result in work that is of a lower quality.

Getting credit

Collaboration has a tendency to obfuscate individual contributions, which are easily discerned when people work alone. This can potentially result in the emergence of a collaboration credit premium in which the share of credit for collaborative output sums to more than 100 percent – meaning that each collaborator, on average, receives credit that is greater than their contribution. This provides an incentive for people to collaborate independent of output quality.

In many organisations, individuals involved in creative tasks are free to choose whether or not to collaborate. We predicted that people may sometimes decide to collaborate on a project even if it is of low quality or if the collaboration diminishes the project's prospects, as long as the expected benefits from the credit premium compensate for this.

When collaboration hurts

This prediction is difficult to test. Even if the credit premium drives collaboration in a wide variety of settings, its effect is hidden. While individuals' decisions on whether to collaborate are observable to the researcher, their motives for making those decisions are not. How could we possibly disentangle the issue of credit from that of learning from collaborators, or simply producing better work in a more enjoyable way? We found a specific context that allows us to infer what happens in all other settings.

Our research exploits a unique norm in economics, which is that authors' names on collaborative publications are listed in alphabetical order. Economists therefore face a very different incentive to collaborate, as those with family names that start with a letter towards the beginning of the alphabet can receive more credit for their contribution – regardless of the

number of collaborators involved or the amount of work they put in – than those whose family names start with a letter towards the end of the alphabet.

Our sample consisted of the full publication records of 1,164 pre-tenure economists in academia. We first showed the existence of a collaboration credit premium by estimating that for a paper within our sample written by two authors, each author received a share of individual credit amounting on average not to 50 percent each, but rather to about 79 percent per author.

Next, we established that those whose family names began with a letter in the first half of the alphabet (A to M) experienced higher levels of credit premium than their peers whose family names began with a letter in the second half of the alphabet (N to Z). Our estimates suggest the former group received on average 82 percent of the credit for collaborative papers. In comparison, the latter group received only 68 percent – a markedly lower level of credit premium. Lower levels of credit premium should lead to less collaboration. Unsurprisingly, we found that the lower down the alphabet an author's family name was, the lower was their propensity to collaborate.

We also confirmed that a credit premium can lead to collaborations that hurt output quality, as measured by the number of citations an economist received on their papers. Within our sample, we estimated that switching from a solo paper to a collaborative paper led to an average decline of 47 percent in the number of citations an individual obtained in a year when the switch was driven by differences in the credit premium. Given that authors receive on average 14 citations per year, the effect is equivalent to a loss of approximately seven citations annually.

Collaboration is not always key

We have moved from a world where collaboration was rare to one in which it is ubiquitous. However, many institutions have been slow to catch up, and there are bound to be frictions. Our findings add an additional dimension to the debate surrounding the benefits and drawbacks of collaboration – one that has been very much understudied because it is hard to observe – and highlight an often-overlooked blind spot in how we view workplace collaborations.

As shown by our results, there are specific circumstances in which individuals will be incentivised to collaborate regardless of the quality of the

project, as long as the credit premium they receive more than **offsets this negative impact**. By highlighting that collaboration can create a gap between what benefits a project and what benefits the individuals working on that project, we hope our study enhances the understanding of the drivers of creative performance as a collective enterprise.

Curbing detrimental collaborations

Our research has important ramifications for organisations that carry out collaborative work. For starters, the presence of a collaboration credit premium means that workers who prefer to operate individually are being consistently disadvantaged through a mechanism that does not depend on their output quality. By being aware of this bias, organisations can ensure that those who prefer to work alone are not systematically punished through their choice not to collaborate.

Firms that ignore this may not only fail to reward individuals who make significant contributions but also end up over-rewarding collaborative work by biasing those who choose to organise their work in a way that benefits themselves more than the project.

Although it may not be easy to eliminate detrimental collaborations driven by the credit premium, closer attention to the division of labour and to each person's incentives can help companies better monitor the performance of individual team members and potentially intervene to mitigate this cost of collaboration. For example, special attention can be paid to cases of decentralised evaluation that can result in each worker on a project receiving more credit for their contribution than if they all reported to the same boss.

Our paper also throws up an interesting point for further study: How to fairly allocate credit on collaborative projects. This can be extremely difficult to isolate or determine accurately, and it creates the very conditions necessary for the collaboration credit premium to manifest itself.

Of course, we are not suggesting that all collaborations have a negative impact on output quality or that all workers exhibit opportunistic behaviour when choosing to collaborate. Rather, we hope that our findings inspire a more nuanced evaluation of collaboration incentives to ensure workers are rewarded fairly, whether or not they choose to collaborate.

Find article at

About the author(s)

Michaël Bikard is an Associate Professor of Strategy at INSEAD.

Keyvan Vakili is an Assistant Professor of Strategy and Entrepreneurship at London Business School.

Florenta Teodoridis is an Associate Professor of Management and Organization at Marshall School of Business.

About the research

"Detrimental Collaborations in Creative Work: Evidence From Economics" is published in *Organization Science*.