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Management quality matters for productivity

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Introduction

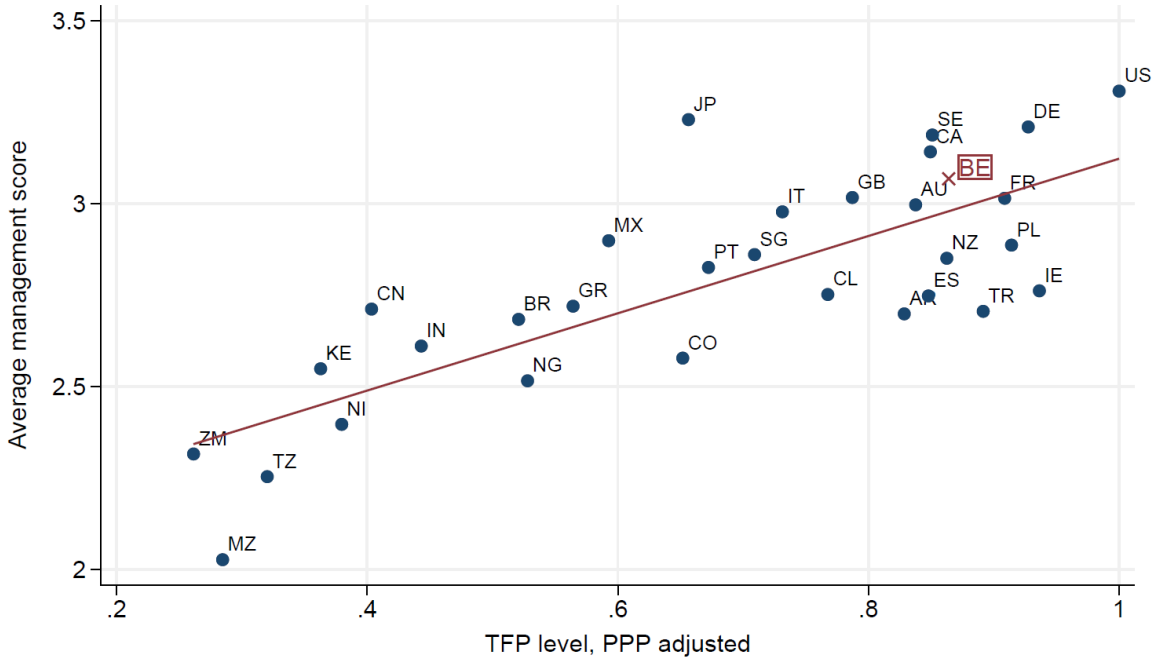
Why do some firms consistently produce more than others with the same number of similarly skilled workers and the same machinery and technologies, even when operating within narrowly defined industries? Part of the answer to this question lies in the quality of their management. Better-managed firms set clearer targets, monitor performance more effectively, solve operational problems more rapidly and are better able to adopt new technologies. These capabilities may not be glamorous, but they are an important driver of productivity (Bloom, Sadun, Van Reenen, 2016).

This note places recent findings on management and strategy consulting in Belgium into a broader discussion on productivity. It argues that management capacity should be treated as an organizational technology: it can be accumulated, improved and diffused, but it also requires investment, time and complementary skills. In terms of internal firm policy, this means that developing robust management capacity is neither a vague question of organizational culture nor something that can be done quickly. Rather it is a capability that can increase the return on digitalization, innovation and training when firms have the incentives and support to implement change.

1. Three stylised facts about management quality and productivity

First, management quality and firm productivity move in sync. International evidence shows a strong positive correlation between a country's average firm management score (based on management quality or the predictability of management quality) and its aggregate total factor productivity (TFP). Belgium has a high-productivity economy with a relatively high average management score, close to that of other advanced economies. This cross-country correlation should not be read as proof of causality: more productive firms and complex technology mixes may require better management, which in turn may raise productivity. Nonetheless, it is a useful starting point as it demonstrates that management quality and firm productivity move together.

Figure 1. Productivity goes hand in hand with good management



Source : Bijnens et al. (2025), based on Penn World Tables, 2019 data on TFP levels at current PPPs (USA=1) and management scores from Bloom, Sadun, and Van Reenen (2017).

Second, the dispersion of management best practices is as important as the average level of management quality. The World Management Survey, which is based on structured interviews with managers, has repeatedly found that management capacity differs across countries, sectors and ownership structures and that, within a

country, the dispersion of management practice mirrors the dispersion of outcomes such as productivity and profitability. Even in advanced economies, management quality differs greatly across firms. Some apply near-best practice while others may be years behind. Imperfect competition, weak governance, information barriers and regulatory frictions can allow weak management to persist (Bloom and Van Reenen, 2010). This suggests that productivity-enhancing policies can gain traction not only by supporting frontier firms but also by accelerating the diffusion of effective practices among laggards.

Third, management quality complements other drivers of productivity. Digital tools, automation, data analytics and AI rarely deliver their full benefits when the organization of work, decision-making powers and workforce skills remain unchanged. In high-wage economies such as Belgium, the productivity payoff from technology adoption depends crucially on firms' ability to reorganize tasks, use information effectively and involve workers in the implementation of new technologies.

2. How good management raises productivity

High-quality management affects firm productivity in three main ways: greater internal efficiency, improved decision-making and scaling, and better allocation of resources across firms.

Within a firm, better management improves day-to-day operations: there are fewer mishaps, less downtimes, smoother handovers and faster problem-solving. Evidence from manufacturing suggests that coherent groupings of complementary practices and systems matter more than isolated initiatives (Ichniowski *et al*., 1995). Effective targets, monitoring, incentives and training reinforce each other: when one is missing, the return from the others is reduced. People management practices are also strongly linked to performance, as shown in the management literature, given that recruitment processes, promotions, performance feedback, and retention policies shape quality, efforts and learning. Complementarities also matter here: incentives work differently when monitoring is weak, and training pays off differently if objectives and follow-up are absent. Organizational channels are also tightly linked to the adoption of technology. Many technologies aimed at raising productivity, including data analytics, automation and AI-enabled tools, require complementary changes in the organization of work. Bloom *et al*. (2012) showed that higher returns on IT among US multinationals were linked to management practices, particularly those related to people management. More broadly, firm-level evidence supports the idea that IT, workplace restructuring and skill demand are complementary (Bresnahan *et al*., 2002). For a high-income economy, this has a clear implication: policies aimed at accelerating the diffusion of technology can underperform if firms lack the management capability and workforce skills to implement change.

Good management also improves the flow of information within firms. Monitoring and target-setting make it easier to delegate decisions, coordinate teams and scale operations. Conversely, weak communication channels can create managerial bottlenecks that limit expansion even when profitable opportunities exist. A field experiment carried out in India, discussed in Bloom *et al*. (2013), demonstrated an association between better management practices and more decentralized decision making process and more extensive use of computers and data systems. This illustrates a broader point: firms often require organizational changes to be implemented before newly adopted technologies can translate into productivity gains.

Management quality similarly affects which firms grow and which stagnate. At the economy-wide level, if poorly managed firms with low productivity survive, resources remain trapped in less-efficient uses, negatively impacting aggregate productivity. Conversely, when better-managed firms expand and weaker firms either raise their productivity or exit the market, aggregate productivity rises through reallocation. Hence, management quality is relevant not only for individual firms but also for the performance of the economy as a whole.

3. Findings from experimental research

A crucial issue for policymakers is causality. Does improving management actually raise firm performance? Evidence from experimental research indicates that it does but with an important caveat: the effects depend on the starting point, the quality of implementation, barriers to technology adoption and the time horizon.

In a landmark field experiment conducted at textile plants in India, Bloom *et al*. (2013) found that intensive support for the introduction of modern management practices generated large productivity gains. These gains took the form of improved quality, greater efficiency and lower inventories. It also changed how firms organized their operations, with more delegation and more systematic use of data. One interpretation is that information barriers were central: many firms were unaware of new practices or underestimated the potential payoff from adopting them.

Evidence from smaller firms in Mexico points in the same direction. Bruhn *et al*. (2018) cited an experiment in which several small and medium-sized firms received management consulting support for a year. These firms improved their total factor productivity, and administrative data indicate continued increases in employment and the wage bill several years afterwards. Consulting improved marketing, financial accounting and long-term planning, in particular.

Historical evidence also suggests that improvements in management quality can persist and spread. Bianchi and Giorcelli (2022) showed that the US "Training Within Industry" program during World War II had long-lasting effects on firm performance and the adoption of beneficial practices, with spillovers along supply chains. This reinforces the idea that the economy-wide return on the provision of management support can exceed the return enjoyed by the individual firm.

There is, however, a second point for attention. Better management can raise wages when productivity gains are shared, but managerial change can also be used to shift rents. Evidence from studying managers trained in business studies in the United States and Denmark (Acemoglu, He, le Maire, 2022) suggests that some forms of managerial change may reduce wages or the wage share. Internal management policies should therefore consider worker outcomes, governance and implementation quality and avoid focusing solely on productivity metrics.

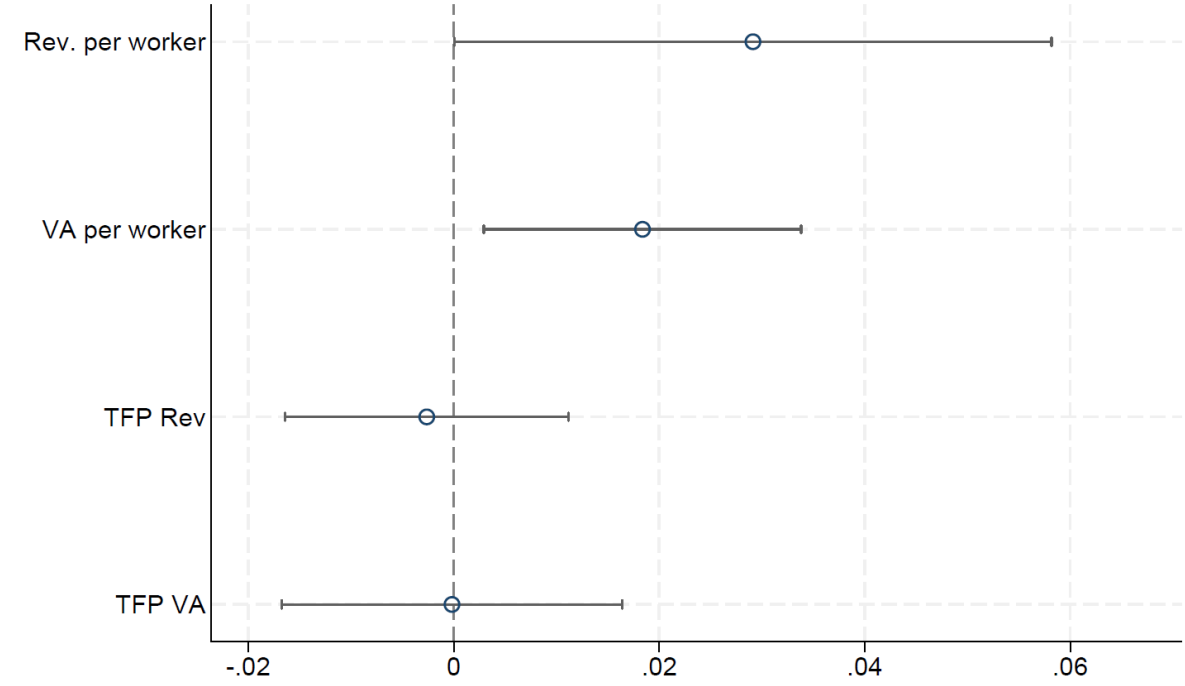
4. Evidence from Belgium on the impact of management consulting

Recent research conducted in Belgium helps fill an important gap. Bijnens, Jäger and Schoefer (2025) examined management and strategy consulting using economy-wide business-to-business transaction data matched with firm-level administrative data. This made it possible to observe which firms buy consulting services and what happens after major consulting engagements.

The first finding was that the use of consulting services is not randomly distributed across the economy. Take-up is concentrated among larger firms and those with relatively high labor productivity. At the same time, the relationship with total factor productivity (and profitability) is U-shaped: both strong and weaker performers hire consultants. This suggests two different motives. Some firms use consultants to push the frontier while others use them to restructure, catch up with competitors or address organizational issues. For the latter group, hiring consultants can help capture substantial low-hanging fruit, while for the former the gains may be smaller and realized more through organizational and strategic changes rather than basic operational fixes.

The second finding is that firms see a sustained improvement in labor productivity after working with consultants. It should be noted that while the cost of hiring consultants can be sizeable, it is typically smaller relative to payroll and episodic, often lasting less than one year. Figure 2 shows that there is an average increase in labor productivity of about 2% over five years after a firm purchases consulting services, driven by modest reductions in employment alongside stable or slightly higher revenue and value added. This pattern is consistent with organizational restructuring and improved efficiency rather than simple output expansion.

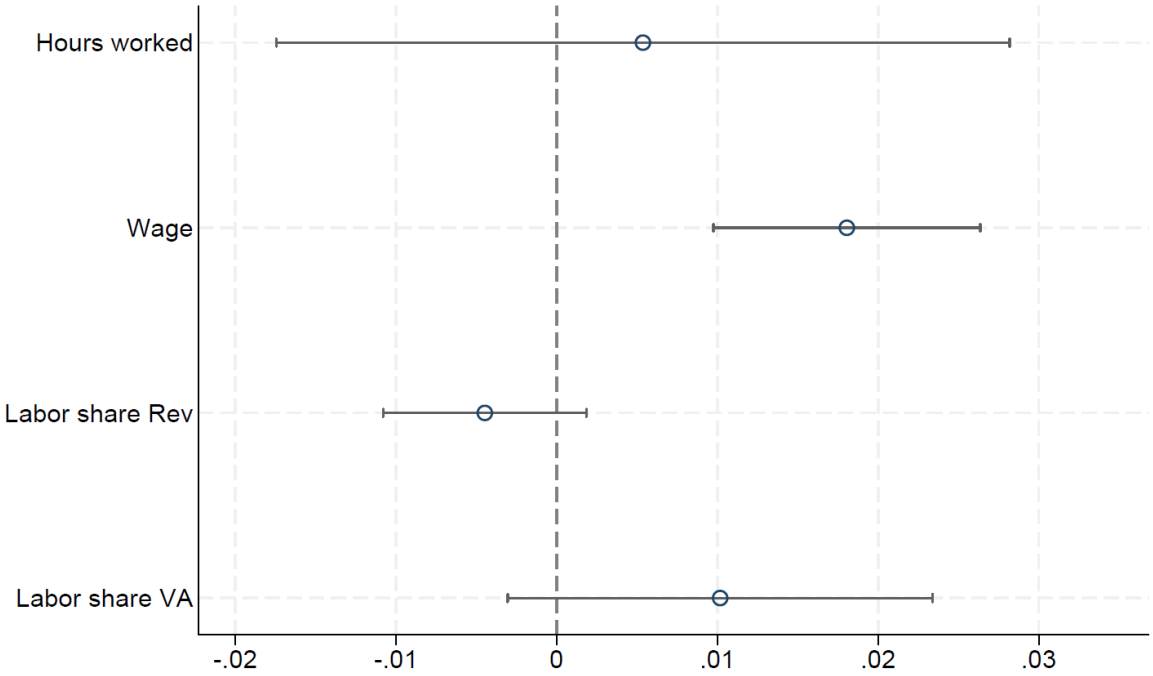
Figure 2. Effect of consulting services on firm productivity



Source : Bijnens et al. (2025)

The third finding is that, in the Belgian data, average wages rise and there is no evidence of a decline in the wage share in value added or revenue. This does not rule out negative outcomes for some workers, especially where restructuring leads to more dismissals, but it does challenge the simple view that consulting is a vehicle for cost-cutting or rent extraction (Mazzucato and Collington, 2026) and that productivity gains mainly come at the expense of labor.

Figure 3. Effect of consulting on firm-level labor outcomes



Source: Bijnens *et al.* (2025)

The last finding, with potential implications for public policy, is that post-consultancy productivity gains are larger for firms that are smaller or initially less productive. This fits a diffusion-related narrative: management consulting can help firms bridge best practice gaps with competitors. However, it also highlights a market failure, namely firms with the largest potential gains may be the least likely to buy high-end consulting[1] services at market prices due to information constraints, limited managerial time and uncertainty about quality and fit.

5. Recommandations

Evidence from Belgium does not imply that governments should indiscriminately subsidize management consulting. It does suggest that the diffusion of management best practice deserves a place on the productivity agenda, together with innovation, digitalization, skills and competition. Six principles for policymakers are listed below.

Begin with diagnostics and benchmarking. Support firms' access to credible diagnostics, including benchmarking against peers and industry best practice. The aim is to reduce information barriers and help firms prioritize those improvements with the highest expected payoff.

Support implementation not simply advice. Evidence suggests that management consulting can work when consultants also provide support for the implementation of advice and internal training rather than only issuing recommendations (Christensen *et al.*, 2013). The public co-financing of advisory services should therefore also focus on the establishment of milestones, operational follow-up and the transfer of skills to staff at client firms. A practical approach would be to design programs for which the provision of a subsidy is conditional on ensuring that measurable steps for the implementation of consulting advice are put in place.

Use peer-learning and networks. Peer-learning, mentoring, clusters and supply chain-wide initiatives can be used to disseminate best practices at lower cost than individual firm-level management consulting, especially where firms face similar organizational challenges.

Strengthen incentives to improve. Management practices respond to competitive pressure and governance (World Management Survey). Policies that make it easier for productive firms to enter the market, grow and restructure can increase the rewards from higher-quality management.

Ensure worker outcomes are considered. Productivity-enhancing restructuring should not be evaluated purely on the basis of output per worker. Evaluations should also track wages, dismissals, wage share, training and workforce composition, so that improvements in management generate gains that are shared broadly across the firm.

Develop evaluation capabilities and data. Belgium's administrative data infrastructure makes it possible to assess programs over time, with appropriate safeguards. Embedding independent evaluation in program design would help identify which actions work, for which firms and under which conditions.

The broader lesson is simple. Higher-quality management is not a substitute for investment, innovation or skills, but it is often the pre-condition that allows these inputs to pay off. A productivity agenda that ignores management quality risks overestimating what the diffusion of technology can achieve on its own. A productivity agenda that takes management quality seriously can help more firms turn ideas, workers and capital into higher value-added, while ensuring that the benefits are shared.

[1] High-end consulting refers to advisory work focused on solving high-stakes corporate, strategic and transformation problems for executives and boardrooms.

References

Acemoglu, D., He, A. and Le Maire, D. (2022) *Eclipse of rent-sharing: The effects of managers' business education on wages and the labour share in the US and Denmark*. National Bureau of Economic Research Working Paper, 29874. https://doi.org/10.3386/w29874.

Bianchi, N. and Giorcelli, M. (2022) "The dynamics and spillovers of management interventions: Evidence from the Training Within Industry program", *Journal of Political Economy*, 130(6), 1630-1675. https://doi.org/10.1086/719277.

Bijnens, G., Jäger, S. and Schoefer, B. (2025) *What Does Consulting Do?*, National Bureau of Economic Research Working Paper, 34072. https://doi.org/10.3386/w34072.

Bloom, N., Eifert, B., Mahajan, A., McKenzie, D. and Roberts, J. (2013) "Does management matter? Evidence from India", *The Quarterly Journal of Economics*, 128(1), 1-51. https://doi.org/10.1093/qje/qjs044.

Bloom, N., Genakos, C., Sadun, R. and Van Reenen, J. (2012) "Management practices across firms and countries", *Academy of Management Perspectives*, 26(1), 12-33. https://doi.org/10.5465/amp.2011.0077.

Bloom, N., Sadun, R. and Van Reenen, J. (2016) *Management as a Technology?*, National Bureau of Economic Research Working Paper, 22327. https://doi.org/10.3386/w22327.

Bloom, N. and Van Reenen, J. (2010) "Why do management practices differ across firms and countries?", *Journal of Economic Perspectives*, 24(1), 203-224. https://doi.org/10.1257/jep.24.1.203.

Bruhn, M., Karlan, D. and Schoar, A. (2018) "The impact of consulting services on small and medium enterprises: Evidence from a randomized trial in Mexico", *Journal of Political Economy*, 126(2), 635-687. https://doi.org/10.1086/696154.

Christensen, C. M., Wang, D. and Van Bever, D. (2013) "Consulting on the cusp of disruption", *Harvard Business Review*, 91(10), 106-114. Available at https://hbsp.harvard.edu/product/R1310F-PDF-ENG. (Accessed: 28 September 2026.)

Ichniowski, C., Shaw, K. L. and Prennushi, G. (1995) *The effects of human resource management practices on productivity*, National Bureau of Economic Research Working Paper, 5333. https://doi.org/10.3386/w5333.

Mazzucato, M. and Collington, R. (2023) *The big con: How the consulting industry weakens our businesses, infantilizes our governments, and warps our economies*. London: Allen Lane.