

Manufacturing Management Practices in the Western Balkans

A study supported by Festo Fellowship



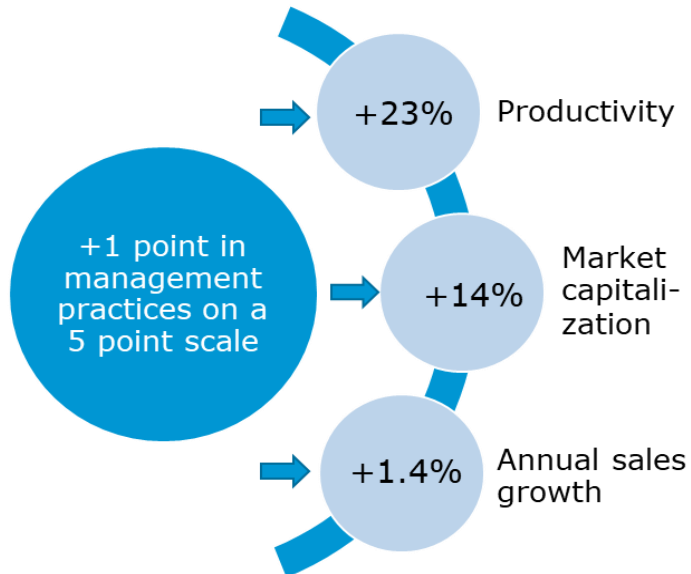
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What are management practices and why are they so important?

- **Management practices** are situation generic, highly structured **sets of activities** that can be **transferred across organizations and industries** to help operations management personnel address **similar operational problems** (Jinhui Wu et al., 2012).
- Firms with strong managerial core practices perform significantly better in terms of productivity and profitability:



*Bloom, N., & Van Reenen, J. (2007). Measuring and explaining management practices across firms and countries. Quarterly Journal of Economics, 122(4), 1351-1408.

Why Western Balkan countries?

- Many MNCs have relocated crucial stages of their production to these countries, mainly due to their **cheap and relatively well-educated available workers**
- Most investors are now facing the **challenge to improve management practices** of their subsidiaries in this region
- Firms from abroad, especially from **Austria and Germany**, continue to be heavily interested in **further investing into the region**
- Around **500.000 companies for the potential further investment***
- Firms **lack detailed knowledge** on where to invest and **what to expect from local management practices**

*Multi-annual Action Plan (MAP) for a Regional Economic Area (2017)

What we did

- Surveyed **385 plant managers** in 4 countries (**B&H, Croatia, Serbia and N. Macedonia**)
- Surveyed approximately **10% of manufacturing plants** with **50+ employees** in each country (**277 plants** in total)
- Got additional answers of **second plant manager in 108 plants**
- **Travelled to all 4 countries** and visited plants to recheck our data and get qualitative data to support our quantitative findings
- **Personally interviewed managers in 28 plants** (10% of our surveyed sample)
- Focused on **4 types of management practices**:

Modern
operations

Performance
monitoring

Target settings

Talent
management

Our 4 key constructs are further divided into 18 topics

Modern operations

Introduction of modern manufacturing techniques

Rationale for this introduction

Performance monitoring

Process problem documentation

Performance tracking

Performance review

Performance dialogue

Target settings

Types of targets

Target interconnection

Target time horizon

Target stretching

Performance clarity

Talent management

Consequence management

Rewarding & promoting high performance

Removing poor performers

Attracting & retaining human capital

We surveyed $\approx 10\%$ of manufacturing plants with 50+ employees and different attributes

Sample size

Number of plants

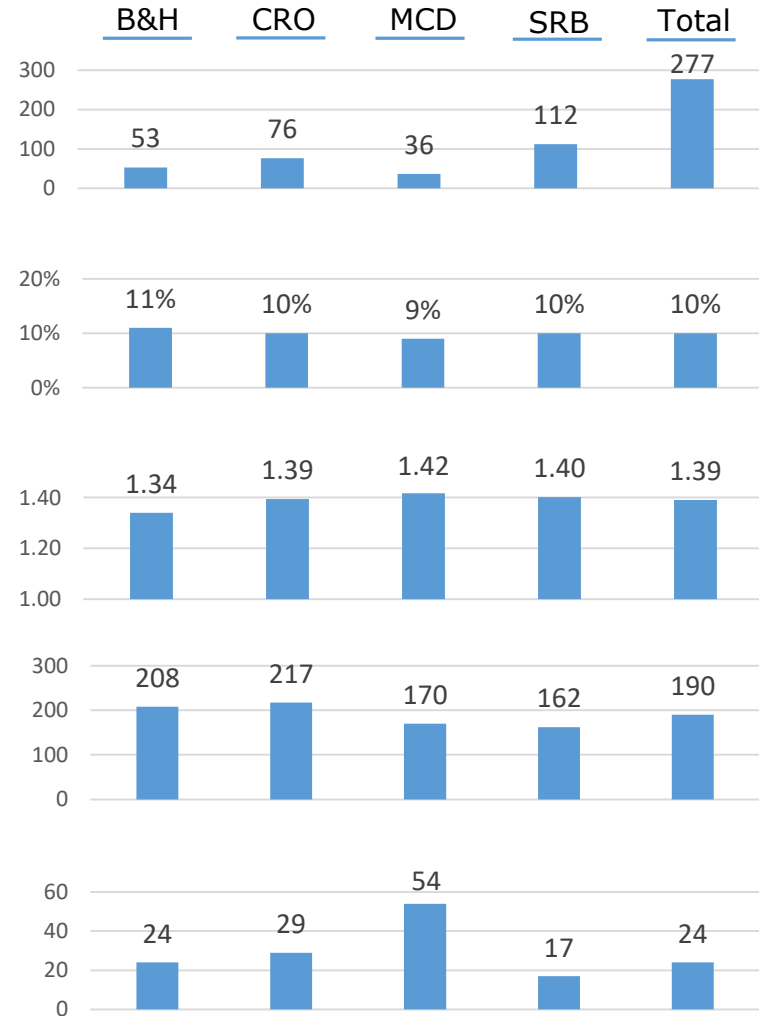
Share of total population of manufacturing firms with 50+ employees

Number of managers per surveyed plant

Plant attributes*
(Median value)

Number of employees

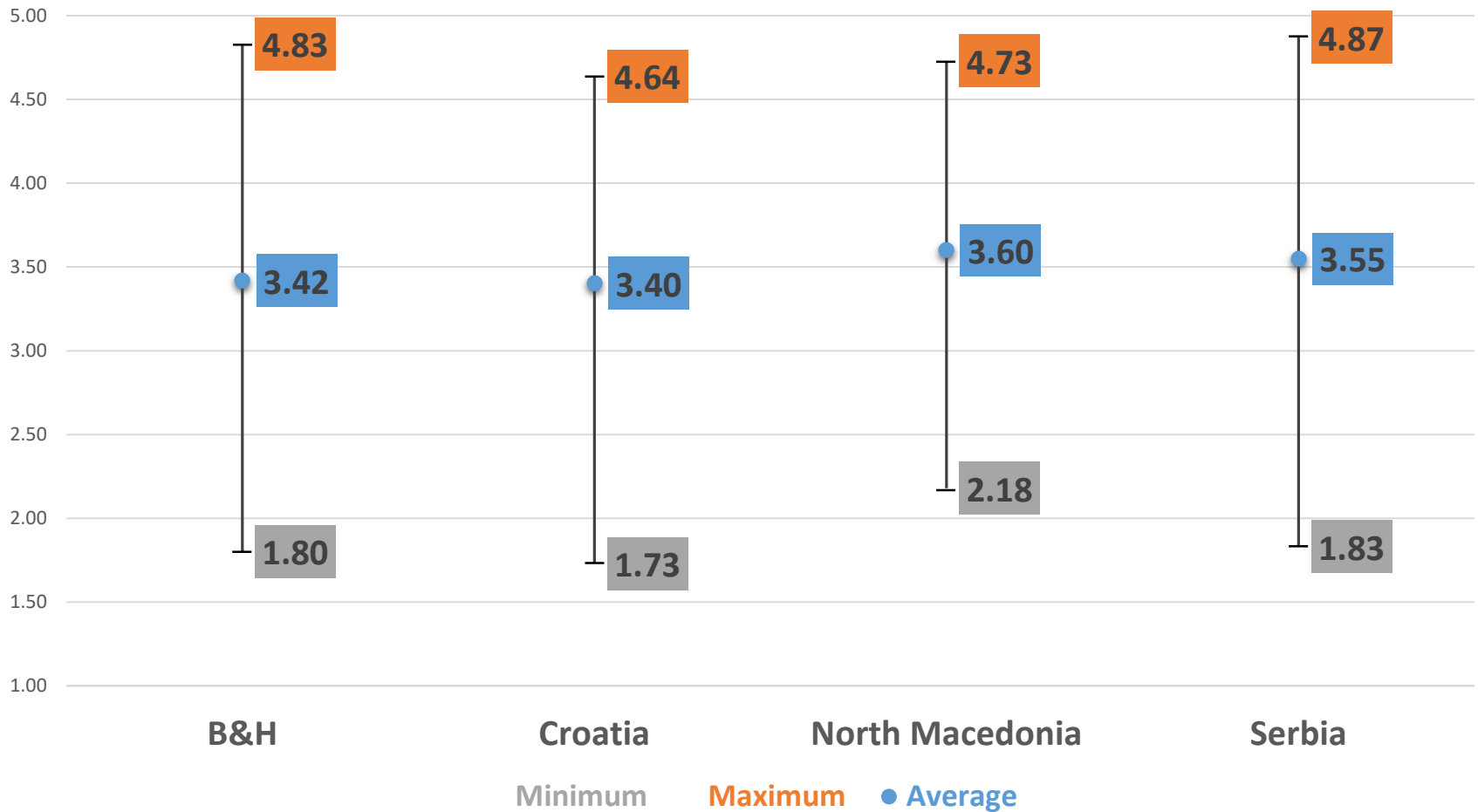
Plant age



Findings

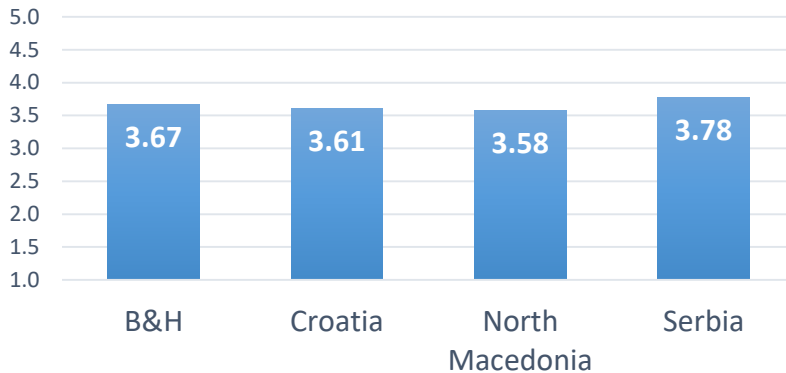


Management practices are similar in all 4 countries of the region

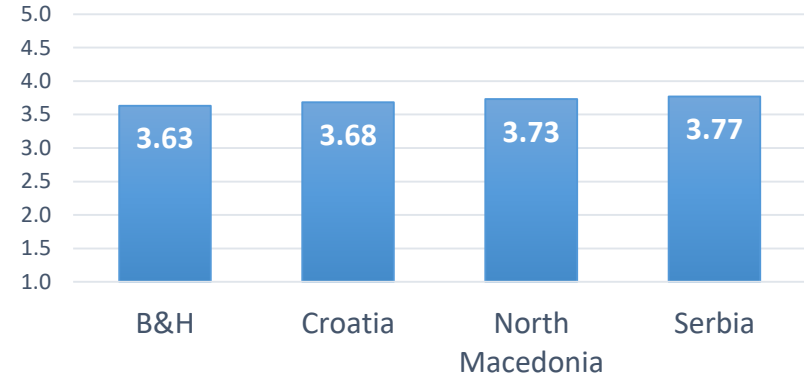


Scores are similar across countries for all practices, and N. Macedonia is a talent leader

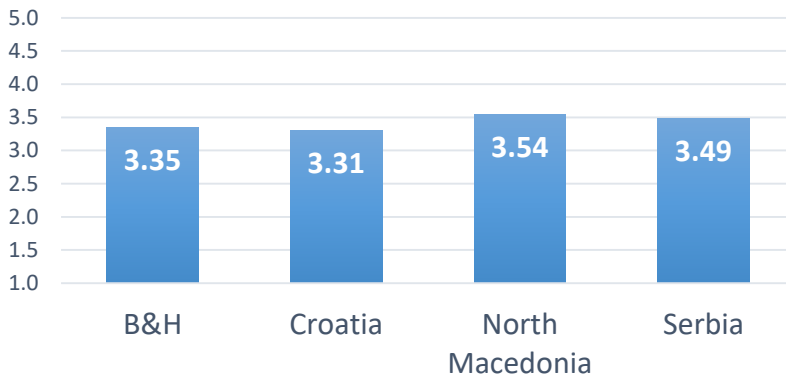
Modern operations



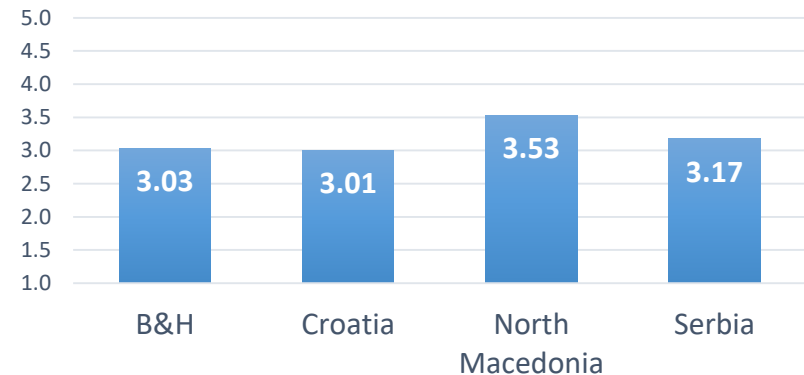
Performance monitoring



Target setting

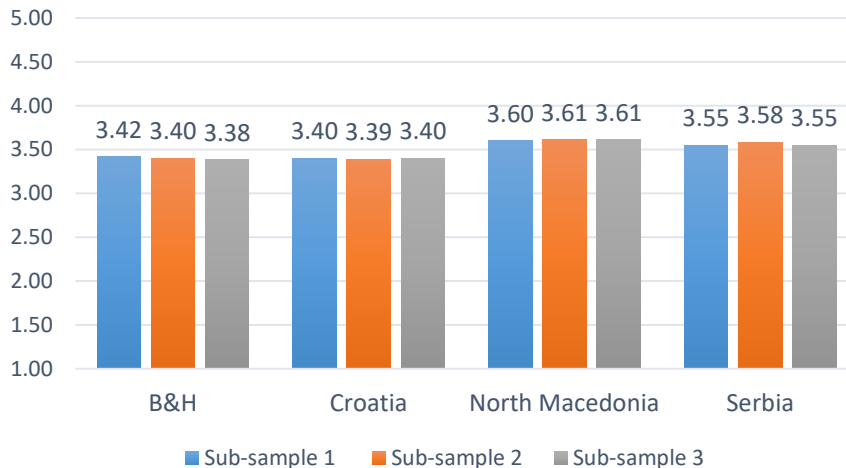


Talent management



Our results are robust

• For different sub-samples, based on seniority of respondents



- 40% of answers from **2 managers from the same plant**:
 - Sub-sample 1 – answers of **less senior** managers
 - Sub-sample 2 – **average** answers of both managers
 - Sub-sample 3 – answers of **more senior** managers

• For a different survey method

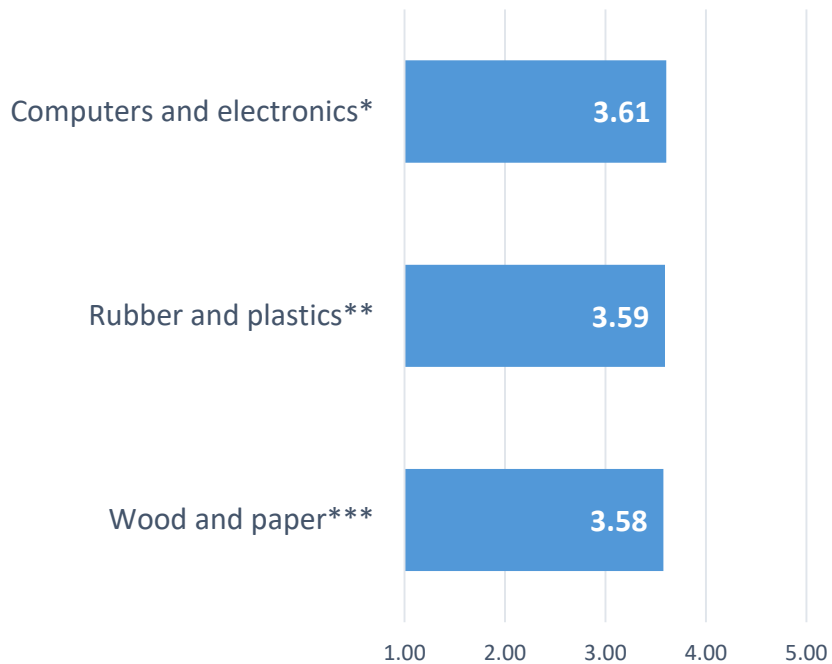
Interviews and self-managers' scores

Correlation	0.76
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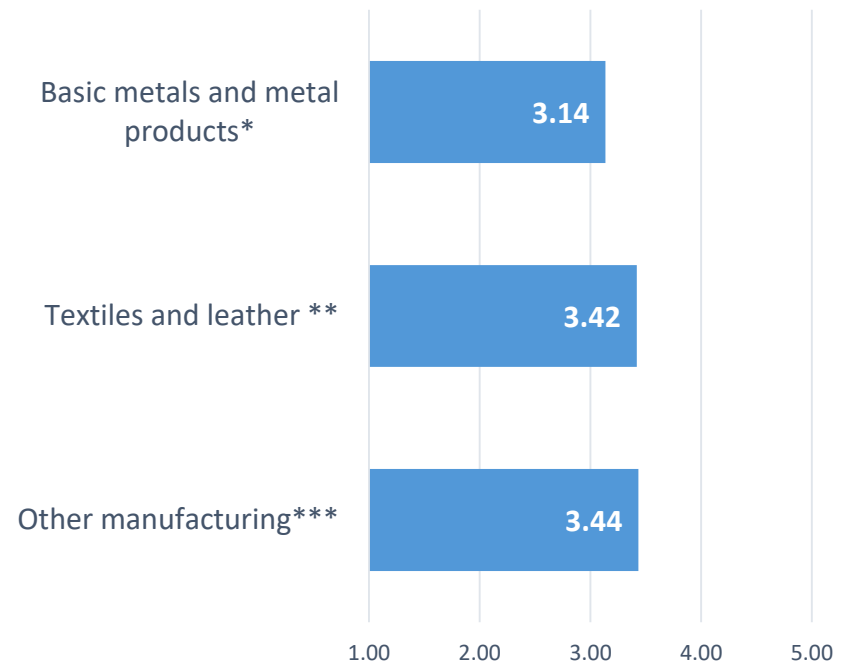
- **Survey scores**
- **Personal interviews** with 28 managers who completed our survey
- **Visit of production facility** in 24 plants and looking at their processes.

There are significant variations in management scores across industries

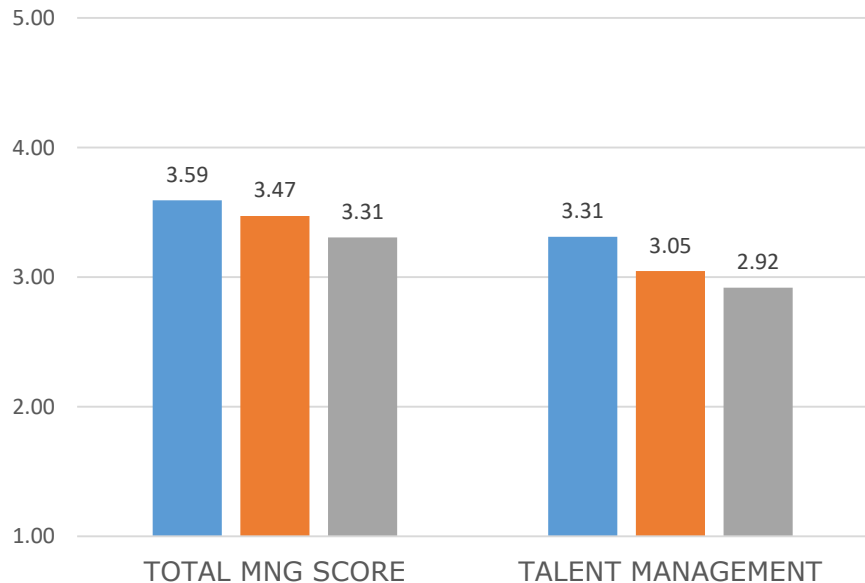
Top 3 industries – total score



Worst 3 industries – total score



Family and founder owned plants have the best management practices

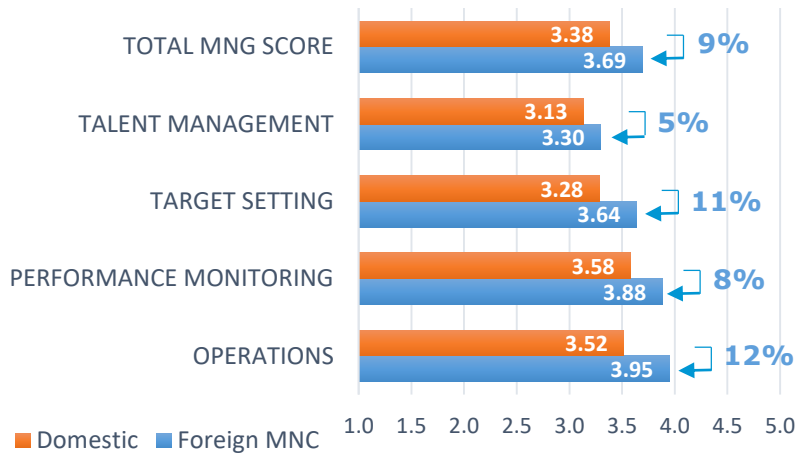


- Family and founder owned plants have **slightly better** management scores compared to plants of other ownership types.
- This leading position is, however, **stronger** when it comes to **talent management** practices.

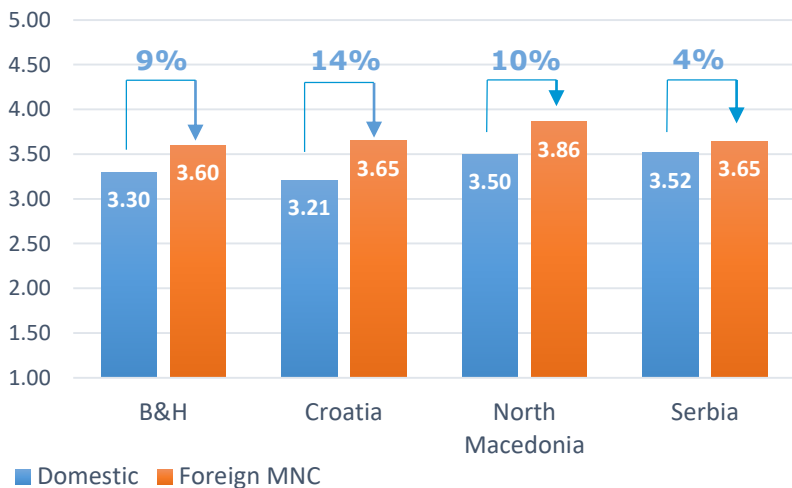
■ Family and founder ownership
■ Dispered shareholders (3+) and owned by private individuals*
■ Others**

*Other than founders, **Owned by government, private equity funds and managers of the firm

In all countries plants owned by foreign MNC are better run than domestic plants

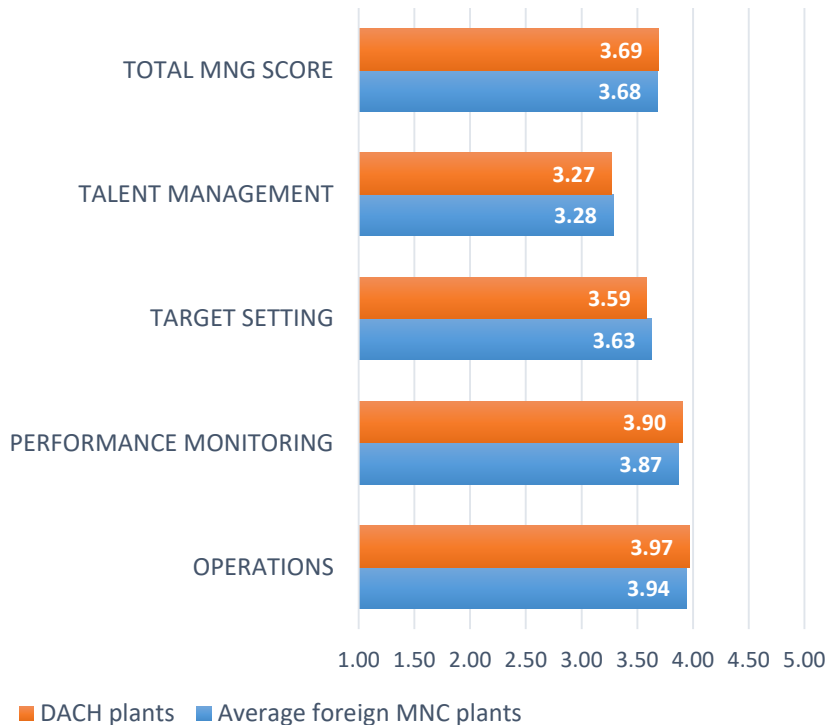


- MNC plants are **5-12%** better managed than domestic plants in **different types of management practices**



- MNC plants are **4-14%** better managed than domestic plants in **different countries** of the region.

Plants owned by MNC from DACH* region have similar scores like average MNC owned plants



- Out of 129 MNC plants, 48 were from DACH region (12 Austrian, 29 Germany, 7 Switzerland).
- **DACH plants have average MNC management scores.**

* Acronym used to represent the dominant states of the German language area – Germany (D for *Deutschland*), Austria (A) and Switzerland (CH)

Origin of MNC and HQ resources can influence the level of management practices in their plants

- Our results* indicate that the **average level of management practices in the MNC country of origin** is positively associated with the level of management practices in their subsidiary plants.
- Furthermore, this **effect** becomes **stronger** when the higher number of **written procedures**** from HQ and **trainings** are available to the plants.
- On the other hand, we found that the effect of HQ country level scores for management practices **does not become stronger** when HQ send **human resources from the HQ**, such as expatriates, short-term assignees and business travelers.

**On a scale: not at all / only a few are available / high number is available, but not in all fields / high number is available in all fields / all procedures in all fields are available

Similar external conditions preventing plants to improve their management practices

Labor

- Emigration taking away highly-skilled workforce
- Lack of qualified manual workers and modern education system
- Workers overprotected by Labor law

Government, institutions and politics

- Inefficient public sector and local government
- High bureaucracy
- Large informal economy and work in grey sector

Taxes, contributions and benefits

- Too high payroll taxes

- **Similar external issues** are identified by managers in all 4 countries: emigration, grey economy, high payroll tax, strict labor law, inefficient public sector, lack of qualified manual workers.
- Plants in all four countries are run at a **similar level of management practices**.
- Plants in **tech industries** are the best run and the worst one are in **metal industry**.
- **Family and founder owned plants** have slightly better management scores compared to plants of all other ownership types. This leading position is, however, much stronger when it comes to talent management practices.
- **Foreign MNC** plants are better run than domestic plants **by 5-12%** in **different types of management practices** and by **4-14%** in **different countries** of the region
- **The average level of management practices in the MNC country of origin** is positively associated with the level of management practices in their subsidiary plants. This effect is even stronger with the higher number of **written procedures and trainings** from HQ.



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