

THEMATIC PAPER: APPRENTICESHIP

Balancing power in vocational education: Micro foundations for Acemoglu and Robinson's state-society heuristic

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ABSTRACT

Acemoglu and Robinson argue that a balance between State and Civil Society ("narrow corridor") is crucial for achieving both long-term civil liberty and effective government institutions. Although Acemoglu and Robinson present ample historical evidence for their thesis, they do not provide extensive micro-foundations for it. This paper aims to close that theoretical gap. We claim that the organizational structures within the Central European "dual system" of vocational education and training (dual VET) provide a compelling practical example of a power-balancing mechanisms. Our institutional economic analysis identifies four principles that balance power between the government and private firms within the dual system. This delicate balance of power facilitated the development of public training schemes, ultimately leading to one of the most stable and effective VET systems in the world.

Key words: vocational education and training, state-society relations, institutional governance

INTRODUCTION

State-society relations have long been a subject of academic inquiry. As early as 1850, Alexis de Tocqueville emphasizes civil society's role for the democratic stability of the young American colonies. During the 1990s, Putnam characterized the role of civil networks for the democratic dynamic of Italian provinces or US federal states (de Tocqueville, 1850; Putnam, 1995; Putnam *et al.*, 1994). In a similar vein, 2024 Nobel Prize winners Acemoglu and Robinson more recently argued that a balanced power dynamic is essential for sustaining liberty and high state capacity (Acemoglu & Robinson, 2022, 2023). Drawing on Hobbes and Locke, Acemoglu and Robinson stress that an effective state must be strong enough to provide public goods. On the contrary, states power should be constrained by an active civil society to prevent despotism (Hobbes, 1651; Locke, 1689). Thereby the authors conceptualize state-society

relations as a continuous power struggle. The state must provide security, order, and public goods without overextending into despotism, while society must counterbalance state power through collective action. An inclusive state arises when state and society both develop strong capacities without overpowering each other. Weak states result from excessive societal power, leading to fragility and economic stagnation. Despotic states emerge when unchecked government authority suppresses civil liberties (Acemoglu & Robinson, 2022; Ostrom, 1990).

While their logic is widely applied in diverse macroeconomic contexts, its micro-level relevance remains underexplored. Thus, institutional dynamics of collaboration and mutual control cannot be fully explained. We address this gap by applying the Acemoglu and Robinson framework to Germany's "dual system" of vocational education and training (dual VET), where

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government and enterprises co-govern vocational education. The balance of power is seen in state oversight and enterprise-driven training. Germany's dual VET system exemplifies an equilibrium where both contribute to effective governance. By identifying key power-balancing principles, we show how macro-level state-society theory translates into institutional arrangements.

POWER RELATIONSHIPS IN VOCATIONAL EDUCATION

VET aims to equip individuals with professional competence for qualified employment in a dynamic labor market, integrating relevant work experience (Section 1 [2] of the German Vocational Training Act [BBiG] in Germany). At the micro level, similar to Acemoglu and Robinson's macro-level framework, power dynamics emerge between the state and private enterprises.

Conceptual clarification

In this paper, we use the term "society" specifically to refer to private enterprises within the dual VET system, as they constitute the primary non-state counterpart in this context. This definition deviates from Acemoglu and Robinson's broader conceptualization, which encompasses civil society organizations, social movements, and grassroots democratic structures. Here we draw on Polanyi's argument that economic factors are intrinsic to society (Polanyi, 1944); Complementarily, "State capacity" refers to the government's role in setting training standards and regulations, while "societal capacity" denotes enterprises' ability to shape training content and skill requirements through industry associations.

The role of ministries and authorities (state)

State agencies through VET policy seeks to expand their influence by legislating training professions, hiring and training VET schoolteachers, defining curricula, and determining examination standards for state-recognized certifications.

The role of private training enterprises (society)

Private training enterprises also strive for influence. They can hire apprentices, set work assignments through in-company training, and determine employment after the training. Their proximity to industry trends provides an informational advantage, enabling them to anticipate future skills demands (Euler, 2023).

Institutional arrangements in VET

The institutional organization of VET determines whether the state or enterprises hold a dominant role.

While Liberal training systems (e.g., UK, USA) grant companies full autonomy over curricula with minimal government intervention (Busemeyer & Trampusch, 2011; Pilz & Wiemann, 2021), State-controlled systems (e.g., Sweden, France) place VET under direct government control, defining skills and competencies at a centralized level (European Centre for the Development of Vocational Training, 2004; Nilsson, 2008).

Building on Acemoglu and Robinson's framework, we argue that institutional imbalance, where one actor dominates the other, effectively reduces overall system capacity. Excessive state control can hinder adaptability, while unrestricted enterprise autonomy risks misalignment with broader educational and economic objectives.

PRINCIPLES FOR AN INCLUSIVE POWER RELATIONSHIP WITHIN DUAL VET

The dual VET system is conceptualized as a collective arrangement (Busemeyer & Trampusch, 2011). Its key mechanisms and overarching principles contribute to a balanced distribution of power between the government and civil society actors. Following these principles fosters an inclusive balance of power, as explained by Acemoglu and Robinson, thereby enhancing the overall capacity of both the state and society. These principles can be applied at multiple stages of the process: from the creation of new training occupations to their ongoing regulation and adaptation.

Principle 1: redistribution of state power and institutionalizing of collective action

Societal capacity emerges through democratic participation and collective action (Ostrom, 1990). The dual VET system institutionalizes this through *indirect state administration* within chambers (Habisch, 2016). The Chamber of Industry and Commerce (IHK) and the Chamber of Skilled Crafts (HWK) in Germany are democratically legitimized organizations representing their members' interests. These bodies operate as self-governing structures, referred to as indirect state administration. Governments do not exercise their administrative function directly but govern indirectly through subordinate self-governing bodies (Habisch, 2021). The chambers are member-supported and democratic.

The chambers, funded and governed by member enterprises, take on key VET responsibilities that were previously handled by the state, including: awarding VET certificates (BBiG section 16); organizing intermediate and final exams (BBiG section 48 [1], 39 [1]); monitoring training company compliance (BBiG

section 37 [2], 76).

Through this institutionalized self-administration, power is transferred from governmental actors to the private sector, enabling training companies to actively shape and manage VET.

Principle 2: leveraging enterprise capacity for innovation and collective decision making

Acemoglu and Robinson argue that broad societal participation in decision-making prevents the concentration of power among elites and ensures that state institutions act in the collective interest (Acemoglu & Robinson, 2016). Furthermore, Acemoglu and Robinson emphasize that societies capable of restraining state power are more willing to share information with the government (Acemoglu & Robinson, 2022).

The dual VET system de facto follows these ideas by integrating private-sector stakeholders into the development of training regulations. Businesses provide real-time market data to keep VET aligned with technological developments and labor market demands.

To use this expertise and the private sector involvement, training regulations are developed collaboratively with employer organizations, trade unions, and the Federal Institute for Vocational Education and Training (BiBB). This process unfolds in three key stages.

Stipulation of benchmarks: employer associations, trade unions, and the responsible federal ministry define key parameters ensuring alignment with sectoral and national requirements.

Development and harmonization: experts from industry and government draft curriculum and skill frameworks.

Enactment of training regulations: the finalized regulations are approved by the Federal Government/Federal States Coordination Committee (KoA), enacted by the responsible ministry, and published in the Federal Law Gazette (BiBB, 2017).

Principle 3: usage of state capacity for standardization

Acemoglu and Robinson argue that a strong state has the capacity to enact and enforce laws, thereby ensuring the provision of public goods such as security, order, and institutional reliability. The dual VET system leverages this state capacity for standardization through mechanisms.

National training regulations: these include occupational titles, training structure, and competency standards and examination. Compliance of the enterprises is monitored

by Chambers (BBiG section 71).

Certification of training enterprises: companies must meet national standards and appoint certified instructors (German Ordinance on Trainer Aptitude [AEVO] section 2 [Germany]).

These mechanisms foster reliable skill certification, labor market transparency, and intercompany mobility on a national level.

Principle 4: maintaining a productive power struggle in training processes

Acemoglu and Robinson argue that a balanced power struggle between the state and society thereby forming an "inclusive state" represents the most productive arrangement for both parties, ultimately bringing about the greatest capacity gain (Acemoglu & Robinson, 2023).

The dual VET system embodies this productive tension throughout the entire training process by alternating between state-led vocational schooling and enterprise-driven in-company training. It ends with a joint examination.

State-led vocational schools deliver both job-specific and general education, including subjects such as social studies and religion (BBiG section 2 [1]).

Within enterprise-led in-company training, enterprises retain autonomy in structuring workplace training, tailoring methods and content to sector-specific demands (BBiG section 2 [1]).

Finally, a joint examination process ensures that theoretical knowledge and practical skills are assessed holistically. The examination board comprises vocational schoolteachers, employers, and employee representatives. Trainee report books further enhance transparency and standardization (Wolter & Ryan, 2011).

IMPLICATIONS AND LIMITATIONS

Germany's dual VET system serves as a compelling example of how a balanced interplay between state and enterprise influence fosters institutional stability. However, its direct replication in other countries is constrained by differing regulatory frameworks. A key implication for policymakers is that rather than attempting wholesale adoption, gradual, micro-level adaptations could offer a more viable approach to strengthening VET structures internationally. This could be done by starting to pursue perhaps one or two of the principles.

Despite its strengths, significant limitations persist

within Germany's dual VET system. Accessibility barriers and regulatory inflexibility may hinder adaptation to technological changes. A growing issue is the shortage of vocational trainees, leaving many firms unable to fill training positions. Addressing these challenges requires institutional adaptation and policy adjustments.

CONCLUSION

This paper contributes to the existing literature by applying Acemoglu and Robinson's concept of power balance between state and society at the micro-level, using Germany's dual VET system as a concrete example. This application provides a foundation for future research on other training systems, and institutions, but also on related phenomena within the framework of Acemoglu and Robinson's theory. Our approach may enhance the understanding of these dynamics and support their further theoretical development.

DECLARATIONS

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Author contributions

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