

A study on differences in economic and social structure between education and food production

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Abstract:

Education and food are vital commodities, yet their economic and social structures differ greatly. Food production requires private enterprise to maintain financial efficiency, while education relies on the government to maximize social efficiency. This paper examines the rationale behind disparities in the distribution of education and food production sectors through the lens of economic efficiency, accessibility and informed public decision-making. Education has positive externalities, promoting social cohesion by teaching shared values, stabilizing the functioning of society and achieving social and educational equity through the participation of an educated population in democratic processes. Private food production can maintain the ability to minimize costs and maximize product quality through market competition. In addition, private companies are better equipped to take on the significant risks associated with agribusiness. Competition and technological innovation in the food industry have made prices accessible, ensuring that essential nutrients are affordable to low-income and vulnerable groups. Public education can also have a positive impact on food production. Public education promotes the long-term development of the food industry by training relevant agricultural talents to carry out technological innovations related to food production. In addition, educated citizens are more likely to be concerned about food safety and its production process—the demand for food transparency and quality forces food producers to adhere to higher standards and innovate. Thus, rationalizing distribution and interaction between the education and food production sectors results in optimal social outcomes.

Keywords: Economic Efficiency; Accessibility; Informed Public Decision; Positive Externalities; Social Equity.

1. Introduction

The delineation of roles between government entities and private businesses in education and food production reflects longstanding societal structures and economic practices. While most governments oversee educational frameworks, the food production sector is driven primarily by private corporations. This distribution raises fundamental questions about the underlying principles guiding these allocations. This essay examines the rationale behind these sector-specific roles through the lens of economic efficiency, accessibility, and informed public decision-making, arguing that these factors justify current prioritisation and interaction in ways that shape optimal societal outcomes.

2. Economic efficiency

The evolution of public education is deeply intertwined with the formation of today's nation-states. With the emergence of the Industrial Revolution and the creation of contemporary powers in Westphalia, authorities started to acknowledge education's vital function in nation-building, especially in cultivating educated citizens and a competent

labor force (Becker et al., 2011). The evolution of high schools is a response to the demands of industrialization and modernization. As governments progressively intervened, public education systems were established to boost the literacy rate, elevate the skill level of the populace, and support the nation's economic and social development.

This historical progression highlights the essential role of education in achieving broader societal goals. As such, education embodies characteristics of a merit good that generates positive externalities that are often under-consumed in a free market. In a purely private education system, many groups would be excluded based on affordability, leading to underinvestment in education. External benefits generated by education would not be fully extracted in a private education system, including elevating civic participation, reducing crime rates, and fostering a knowledgeable workforce. Moreover, education promotes social cohesion by teaching shared values, norms, and knowledge that bind a society together (Orr, 2011). These benefits are enjoyed collectively, regardless of who pays for

or directly participates in the educational process. Consequently, this inherent nature of educational benefits leads to inefficiencies in private provision (Aldanondo-Ochoa & Almansa-Sáez, 2009). Hence, government education provision becomes crucial to achieve a socially efficient output.

In contrast to public education, the food industry relies on private enterprise to be efficient. In the early stages of human civilization, food production was primarily subsistence-based, with families and small communities growing crops and raising livestock for consumption (Giller et al., 2021). However, as populations expanded and urbanization accelerated, the limitations of subsistence farming became increasingly apparent. The Industrial Revolution marked a turning point, introducing mechanization, improved agricultural techniques and transportation infrastructure that enabled the large-scale production and distribution of food. The rise of industrialized agriculture has brought a greater focus of capital on technology, research and development. Large investments have led to innovations such as synthetic fertilizers, pesticides and genetically modified organisms. These innovations have increased crop yields and food supplies, enabled further growth of urban populations, and energized global trade.

Therefore, food production has remained private for several economic reasons rooted in market efficiency. The market efficiency of private food production lies in its ability to minimize costs and maximize product quality through competitive practices (Anderson & Feder, 2007). Furthermore, private entities are better positioned to undertake the substantial risks associated with agricultural ventures, such as unpredictable weather patterns and fluctuating market prices. Unlike public sector entities, private firms have the flexibility to adapt quickly to changing conditions and invest in cutting-edge technologies. Therefore, the economic rationale for keeping food production private is robust, emphasizing efficiency, competition, and effective risk management.

3. Accessibility to goods and services

Moreover, competition and technological innovation in the food industry allow accessible pricing, which is crucial for achieving social equity. Since private enterprise prioritizes efficiency, it creates a competitive landscape fostering growth and price-led marketization (Trienekens & Zuurbier, 2018). Also, innovations and advances in agriculture, coupled with continuous optimization of supply chains, have significantly increased access to high-quality, reasonably priced food. This accessibility ensures that essential nutrients are affordable for all segments of society, especially low-income and vulnerable populations.

On the other hand, social equality is actualized through the public provision of education. Unlike the food indus-

try, private education has a higher barrier to entry due to the high fixed costs that require regulatory approvals and significant capital investment related to school infrastructure. Given the high fixed costs and limited competitors in the market, private education is often far from affordable for most households, making the merit good inaccessible to the public.

Therefore, government involvement in education addresses equity issues, ensuring that all children, regardless of socioeconomic background, have access to quality education (Shields & Mohan, 2008). A standardized education system provides students from diverse backgrounds with a standard foundation, promoting unity among different social strata. This approach mitigates social inequalities and supports social mobility, allowing individuals from disadvantaged backgrounds to improve their circumstances through education.

Beyond improving individuals' circumstances, universal education drives long-term societal advancements, including positive changes within the food industry. By providing broad access to education, especially higher education, governments ensure a steady supply of well-trained labor with agricultural and food processing techniques and supply chain management knowledge to improve efficiency and productivity in the food sector. Additionally, accessible education allows more researchers with the necessary skills and expertise to conduct technological innovation related to food production or provide solutions to challenges such as climate change, pest control, and sustainable farming practices. As such, public education has a predictive relationship with the long-term development of the food industry by training talents and well-educated labor from the public.

Despite the vitality of public education, private education is not necessarily undesirable to society. Private educational institutions promote progress and offer tailor-made initiatives for certain socio-economic areas, which can be highly beneficial to educating children. Like the food industry, those private institutions are more motivated to innovate and test modern teaching methods and modules unavailable in public schools. Government agencies often utilize financial incentives to promote private investment in the education sector, thus assuming the dual role of overseer and consumer of innovative ideas. This strategy reflects a broad consensus on the fundamental public advantages of education and has led to a recent strong focus on education across all sectors.

4. Informed public decision

An educated population, aided by the public provision of education, will likely make more informed decisions that generate positive externalities at both individual and societal levels. Profit motivates private enterprises in a

competitive environment to differentiate their products. Therefore, producers offer consumers a wide range of products (Truong et al., 2022). Educated consumers about nutrition, food safety, and sustainability can make choices that improve their health and the environment.

Also, the development of broader democracies in recent centuries further drove a need for a more equitable education system for now enfranchised citizens. Politically, education is essential for the functioning of a democratic society. An educated populace is likelier to participate in democratic processes, make informed decisions, and hold their leaders accountable. Moreover, universal suffrage demands equitable education offerings from the government, lessening the incumbent's risk of being voted out by those who feel unfairly excluded. Thus, the compelling rationale for government involvement in high schools is firmly anchored in high schools and is fundamental in creating a cohesive, democratic, and equitable society.

Nonetheless, a privately owned food enterprise has potential detrimental implications that public awareness counteracts. Compromised food safety and environmental pollution are examples of how agricultural companies may shape food policy to their advantage at the expense of the public welfare. However, under the provision of public education, educated citizens are more likely to be concerned with the safety of food and its production process. The demand for transparency and quality of food pressurizes food producers to adhere to higher standards and innovate continuously.

In the event of a monopolistic food sector, governments play a crucial role in regulation, monitoring and implementing controls. While private enterprises grow, governments regulate the food industry to protect public interests and maintain food security (Kalfagianni, 2004). They balance the benefits of private sector efficiency with the need to safeguard societal and environmental interests, ensuring that food production methods are sustainable and equitable. In addition, the Government prioritizes food supply networks, especially in food shortage areas, to ensure the stability of food supply. If this complementarity is desired to be efficient, this poses new challenges for both parties, including, but not limited to, the transparency and strength of regulation.

5. Conclusion

Education and food are vital goods that differ fundamentally in their economic and social structures. While food production requires a private enterprise to stay economically efficient, education relies on the government to maximize social efficiency. Assuming both sectors operate efficiently, they become accessible to the public due to

low pricing. Accessible education and food are argued to be essential contributors to societal equity and equality. Consequently, accessible education also supports the long-term development of the food sector through research innovations and public awareness. Under governmental interventions in food production, the private sector can be safeguarded against potential downfalls from powerful monopolistic firms. In the banquet of societal and economic progress, education and food production from public and private sectors collaboratively serve as a balanced feast for a flourishing society.

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