2025 Research report summary

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Productivity in a Changing Economic Landscape: The Role of Investments, Technology, and Market Dynamics

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Summary

Productivity is a critical source of long-term economic growth and higher living standards. As productivity growth slows across Europe and the gap with the US continues to widen, understanding how to strengthen productivity in today's rapidly changing business environment has never been more important. At the same time, the economy is undergoing fundamental changes due to the emergence of platform economies, digitalization, and artificial intelligence (AI), as well as an expanding service sector and a geopolitical climate marked by uncertainty and trade tensions.

The report examines firm productivity, investments, and market conditions in the Swedish business sector. A detailed firm-level analysis shows how productivity is linked to investments, innovation, exports, competition, and market conditions. The analysis highlights the key factors that enhance productivity, emphasizing various types of investments. We document the short and long-term effects of investments in new technology, intangible assets, research and development (R&D), and AI on future productivity. We also explore how access to international markets and digital infrastructure, competition dynamics, and venture capital influence firms' productivity and strategic decisions. The findings provide valuable insights for policymakers aiming to strengthen Sweden's competitiveness in an era of rapid technological change and growing global uncertainty.

New Measures of Productivity

A key novelty of this report is that we provide meaningful measures of firms' total factor productivity (TFP) using methods at the international research frontier and detailed firm-level data. When measuring productivity, we consider firms' incentives and input choices in an uncertain environment, recognizing that firms react differently to new technologies and changing market conditions. We document how firm-level productivity evolves over time and across firms, capturing the entire productivity distribution and its determinants. Unlike simple measures such as labor productivity, TFP accounts for capital intensity, pricing, and market conditions. This enables a more accurate analysis of firms' true efficiency, isolated from economies of scale and market power. The analysis is based on our own research on firm productivity, with a particular focus on high-tech services, retail, and manufacturing.

What Drives Firm Productivity?

Our results show substantial heterogeneity in productivity among firms within the same industry. We find that investments in technology, R&D, and intangible assets have significant and persistent effects on firm productivity. Technology investments yield particularly strong productivity gains in high-tech industries and among large firms, whereas intangible investments have a long-lasting impact on productivity. Access to digital infrastructure also spurs firm productivity. Moreover, we find a strong link between productivity and the propensity to innovate. High-productivity firms launch new products and services more frequently, implement more product and process innovations, and register more patents.

Firms active in export markets consistently have higher productivity than those that operate only nationally. Exporters also invest more in R&D. Meanwhile, intensified competition from new firms or reduced regulatory barriers forces incumbents to improve productivity and update their offerings, while low-productivity firms exit.

To strengthen long-term productivity growth and competitiveness in a rapidly changing global economy, policy must enable investments, enhance innovation capacity, and ensure favorable market conditions. Based on our research, we propose six policy recommendations for a more productive and competitive business sector.

Policy Recommendations

PROPOSAL 1. PRIORITIZE INVESTMENTS AND NEW TECHNOLOGY

To meet the challenges of today's rapidly changing economy, investment, technology, and innovation must be prioritized in the policy debate. Our research shows that investment in new technology has long-term positive effects on productivity. However, realizing their full potential requires the right incentives, relevant skills, and supportive conditions. This is crucial for firms to fully capture the benefits of new technology and AI, particularly for small and medium-sized enterprises. Our research also highlights the importance of a secure, reliable, and resilient digital infrastructure to strengthen productivity and enhance competitiveness.

Assessing the impact of new technology requires a deep understanding of the underlying economic mechanisms and firms' incentives. This is particularly important in a service-driven economy, where investments not only generate productivity gains but also create value through new products, higher quality, and innovation. It is therefore essential that decisions and strategies rely on adequate productivity measures that capture the long-term effects of investments and distinguish true efficiency from factors such as economies of scale and pricing.

PROPOSAL 2. STRENGTHEN THE CONDITIONS FOR INTANGIBLE INVESTMENTS

Intangible investments play an increasingly important role in driving productivity growth, particularly in knowledge-intensive industries. Despite this, regulations and measurement methods are still largely designed for a tangible economy. Better conditions for investing in intangible assets are needed to boost productivity, especially for small and medium-sized enterprises. We welcome the recent policy initiatives in this area. Nevertheless, more research is needed to clarify how, and under what conditions, intangible investments contribute to productivity growth, ensuring that future policies are grounded in solid evidence.

PROPOSAL 3. STRENGTHEN INCENTIVES TO INVEST IN R&D

Investments in R&D are crucial for future productivity and innovation. Our research shows that tax incentives for R&D have particularly strong effects on firms with established R&D activities. Venture capital also plays a key role in the formation of new ideas and the creation of new firms. A differentiated and well-functioning financing system is therefore essential. The ongoing investigation of tax incentives for R&D is a welcome step, as is the EU's capital markets union initiative, in which Sweden plays an active role. To close the technology gap with the US, which has attracted both capital and talent, Sweden needs policies that stimulate private investment without crowding out existing initiatives, while ensuring a strong supply of skills. Innovation capacity strengthens when R&D is prioritized, especially as technological advances accelerate and global competition intensifies.

PROPOSAL 4. ENSURE ACCESS TO GLOBAL MARKETS AND INTEGRATE TRADE AND INNOVATION POLICY

For a small and export-dependent country like Sweden, access to global markets is crucial for productivity, innovation, and growth. Our research shows that tariffs on Swedish exports significantly dampen firms' investments in R&D, resulting in long-term reductions in productivity and innovation. New US tariffs on the EU announced in 2025 underscore the rising uncertainty in global trade policy. Safeguarding export opportunities and access to global markets is essential, not only for goods but also for services. The EU's strategy to strengthen the internal market is a step forward, but further action is needed to guarantee stable and cost-effective access to international markets. Our research confirms that trade and innovation policy are interconnected. Policymakers should hence adopt an integrated approach in designing and coordinating these areas to strengthen global competitiveness.

PROPOSAL 5. FOSTER WELL-FUNCTIONING COMPETITION

Our research shows that competition drives productivity growth, strengthens incentives for innovation, and facilitates efficient structural changes in markets. New firms spur renewal by introducing new products, services, technologies, and business models. They also create competitive pressure that forces incumbent firms to improve their productivity and upgrade their offerings, while low-productivity firms exit the market.

Policymakers can support this dynamic process by ensuring clear and predictable rules, favorable conditions for new entrants, and genuine opportunities for growth. This includes lowering entry barriers, providing access to venture capital and strategically important markets, supporting a favorable innovation climate, and reducing regulatory burdens.

Decision-making in the service and knowledge-based economy calls for a forward-looking and broader view of competition that covers prices, market shares, technological development, innovation, and the breadth and quality of product and service offerings.

PROPOSAL 6. MODERNIZE ANALYTICAL TOOLS FOR THE NEW ECONOMY

Services, platforms, data flows, cloud computing, and AI technology dominate today's economy. While markets are being rapidly reshaped at their core, alongside increased global uncertainty and growing societal challenges, our analytical tools remain adapted to yesterday's economy. Research and policy analyses need a new generation of tools that reflect firms' incentives and how markets actually operate and change over time in the new service- and AI-driven economy. The analyses need to capture firm behavior, institutional conditions, uncertainty, and the roles of technology and demand. They must also be based on better data on prices, costs, and the supply of products and services. This makes it possible to determine which strategies and policies create value for both consumers and firms, unlocking the full potential of productivity.

It is encouraging that productivity and competitiveness now stand at the forefront of the policy agenda. But this is not enough. Addressing the challenges and opportunities of the new economy requires investment in new analytical tools. Modern analytical tools enable policymakers to develop knowledge-based insights that guide well-informed policies, benefiting consumers, firms, and society at large.

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