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Korea's Service Industry Productivity: Structural Challenges and Policy Options

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[1] To What Extent Has Korea's Service Industry Achieved Quantitative and Qualitative Growth?

■ **Korea's service industry has undergone substantial quantitative expansion, but gains in productivity and efficiency have not kept pace.** Since 1970, the private service sector(excluding public administration, defense, and real estate) has grown at average annual rates of 7% in output and 3% in employment. As of 2024, it accounts for 44% of nominal GDP and 65% of total employment. **Nevertheless, labor productivity(real value added divided by total employment) in the private service sector has stagnated at merely 40% of that in manufacturing over the past two decades, lagging behind major economies and showing only modest improvement.**

■ **In particular, service-sector productivity in the post-pandemic period has fallen well below its pre-pandemic trajectory.** Productivity in **high value-added service industries**(finance&insurance, information&communication, and professional&scientific&technical services) briefly surged on the back of rising demand for less-contact-intensive services and digital transformation, but **has been on a downward path since 2022 and now stands about 10% below its long-term pre-pandemic trend.** This contrasts sharply with the United States, where high-tech service sectors(information& communication, and professional&scientific&technical services) have played a leading role in the post-pandemic recovery, both in terms of employment and productivity.

■ **Productivity in low value-added service sectors**(wholesale&retail trade, accommodation&food services, and transportation&storage) **also fell sharply in the immediate aftermath of the pandemic shock. Although it has been gradually recovering, it still stands about 7%**

below its pre-pandemic trend. In particular, productivity in labor-intensive industries—such as accommodation and food services, business support services, and health and social work—plunged in 2020 and has since remained stagnant at levels lower than before the pandemic.

[2] What Are the Structural Factors Limiting Productivity in the Service Industry?

❶ **[Perception as a Supporting Sector for Manufacturing, a Regulated Industry, and a Provider of Public Goods]** The Korean service sector, with approximately 32% of its total output directly or indirectly linked to goods exports as of 2020, **has long primarily focused on playing a supporting role for production and export activities in the manufacturing sector, mainly in areas such as logistics, transportation, and finance. As a result, its independent demand base remains fragile.** Furthermore, in the general social perception, the service sector has often been regarded not as an "industry" that generates value added in itself, but rather as a provider of public goods or activities offered free of charge. This perception has, to some extent, influenced industrial policies to approach the service sector mainly from the perspective of regulation and public interest. This has served as a factor that restricted private capital investment from entering the service sector, **allowing its labor-intensive structure to persist**. Meanwhile, the investment rate in the private service sector dropped from 26% in 2000 to 18% in 2022, and its market capitalization in the stock market also remains at half that of manufacturing, entrenching the weakness of its foundation for autonomous growth.

❷ **[High Value-Added Service Sectors: Excessive Dependence on Domestic Demand and the Public Sector, and Weak Innovation] Excessive reliance on domestic demand and the public sector is considered a structural factor that dampens the incentive for companies to boost profits through entry into foreign markets or innovation**. In the case of knowledge-intensive services, which are generally regarded as high value-added, nearly 98% of total corporate sales$_{\text{as of 2021}}$ are concentrated in domestic demand, including transactions with the government, public institutions, domestic companies, and consumers. Whereas major countries' high value-added service firms are rapidly expanding their global footprint, only 2.2% of Korean knowledge-intensive service firms have any experience in entering overseas markets$_{\text{as of 2021}}$. Recently, as the growth momentum in domestic demand has weakened due to Korea's demographic contraction, coupled with **the accelerated entry of global Big Tech companies into the Korean market,** domestic companies are facing dual pressures: a shrinking domestic demand base and intensifying competition.

❸ **[Low Value-Added Service Sectors: The So-Called "Revolving Door Competition" among Livelihood-Oriented Self-Employed Individuals] In low value-added service sectors, the weak foundation for quality jobs has led to a rise in livelihood-oriented self-employment**with 60% of the self-employed in 2024 engaged in these sectors, **resulting in the entrenchment of small-scale businesses**with 73% of them being single-person businesses. The concentration of single-person or family-run businesses in certain sectors with low barriers to entry and minimal initial capital requirements is making it difficult to achieve economies of scale. This has resulted in distorted firm dynamics, characterized by repeated entry and exit among small-scale self-employed businesses, thereby constraining the foundations for corporate growth, resource reallocation, and job creation.

[3] What Policy Direction Should Korea Pursue for Its Service Industry?

■ **[The First Step Toward Strategic Industrialization: Legal and Institutional Reform] It is necessary to establish a higher-level legal framework for industrial policy that encompasses all relevant sectors by reflecting the trend of manufacturing-service convergence. In particular, this effort should be underpinned by bold deregulation to ensure the flexible accommodation of emerging industries and convergent services that are not adequately covered by existing regulatory systems.** To this end, an inclusive policy platform should be designed through the establishment of a pan-governmental control tower, the preparation of common foundations such as digital infrastructure, standardization, and data linkage, and the systematic reform of regulations that hinder convergence—all of which should be substantially incorporated into forthcoming legislation. The Framework Act on the Development of the Service Industry, currently under deliberation in the National Assembly, is expected to serve as the legal framework to take on this role.

■ **[High Value-Added Service Sectors: Export Strategies Leveraging Manufacturing Strengths]** Since both manufacturing and service sectors face limitations in enhancing export competitiveness independently, **they should strategically broaden their export reach by maximizing synergy through cross-industry convergence**. Korea possesses intellectual assets and outstanding operational capabilities accumulated through manufacturing, generating strong potential to convert manufacturing know-how into AI- and data-driven industrial services. In addition, **sectors with high global demand, such as content and digital healthcare, can complement digital-based services by combining with manufacturing technologies**, thereby overcoming their limitations and enhancing value, while also expanding opportunities for new market creation.

■ **[Low Value-Added Service Sectors: Livelihood-Oriented Self-Employed Individuals' Transition to Wage and Salary Employment and Achieving Economies of Scale]** To address the structural constraints of low value-added service sectors, rather than directly reducing the number of small-scale self-employed businesses, it is necessary to **foster a business environment that can create more quality jobs, in an effort to encourage livelihood-oriented and involuntarily self-employed individuals to transition to employment within mid- to large-sized enterprises.** To this end, it is critical to **enhance access to capital** by companies to enable capital accumulation and business scaling**.** This should also **be accompanied by measures to facilitate enterprise formalization and corporatization**, such as incorporation and raising the share of directly operated outlets within franchise systems. Moreover, institutional support and customized financing should also be **strengthened to support the business lifecycle from entry to exit** (including startups and closures), thereby **restoring the overall dynamism of the industry**.

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BANK OF KOREA

Ⅰ. Background

Technological advancements and widespread digital transformation are rapidly breaking down boundaries between industries. As the distinctions between tangible and intangible, goods and services, and offline and online become increasingly blurred, the identity of the service industry is no longer confined to a residual category overshadowed by agriculture, forestry, fishing, and manufacturing. Rather, it is positioning itself on one front as a bridging facilitator of connection and convergence with other industries such as manufacturing, and on another as a proactive driver evolving into new business models underpinned by trade expansion in knowledge, culture, and digitalization. The pandemic acted as a catalyst, accelerating this structural transformation of the service industry.

However, Korea's service industry has yet to adequately adapt to these changes, and its structural and productivity improvements also remain insufficient. While the share of the service sector in GDP has steadily increased, at least half of its output and employment is still concentrated in low value-added services[1], making it difficult to conclude that the industrial structure has advanced. In particular, the stagnation of qualitative growth is even more evident in terms of productivity. During the early phase of the COVID-19 pandemic, some sectors seemed to show temporary productivity gains driven by the rising demand for contactless services. However, following the end of the pandemic, productivity growth in low value-added service sectors such as wholesale and retail trade and accommodation and food services has not only fallen below past trends, but productivity in high value-added service sectors such as finance and insurance, information and communication, and professional, scientific and technical services has in fact deteriorated.

The failure to effectively adapt to the structural transformation of the service sector is not merely a problem confined to a few industries, but rather a manifestation of the structural growth constraints embedded in the Korean economy. In particular, as Korea's manufacturing-based, export-led growth strategy is increasingly constrained by China's technological catch-up and the strengthening of protectionism among major economies, the urgency of diversifying growth engines—especially through high value-added services—has become ever more evident. Against this backdrop, diagnosing the structural limitations of the service industry and its potential for change is, in effect, part of the process of assessing the sustainability and competitiveness of the Korean economy.

Building on this sense of urgency, this report conducts a comprehensive assessment of the factors behind the stagnation in the productivity of Korea's private service sector[2]. In particular, it focuses on the fact that

1) For details on the classification criteria for high- and low-value-added services, see Box 1.
2) In this report, the private service sector is defined as encompassing all service industries except for public administration, defense, and compulsory social security(Korean Standard Industrial Classification [KSIC] Section O), and real estate activities(KSIC Section L).

high value-added service sectors—despite their high productivity levels and the expectation of strong post-pandemic growth through convergence with digital technologies—have instead experienced stagnation, and seeks to examine the structural constraints underlying this trend and the corresponding policy responses.

The structure of this paper is as follows. Chapter II examines the quantitative growth trajectory of Korea's service industry and reviews the qualitative growth trends, with a focus on productivity indicators, as well as changes observed after the pandemic. Chapter III analyzes the structural constraints that have led to the stagnation of service industry productivity from multiple perspectives, including perceptions of the industry, demand structure, and employment structure. Finally, Chapter IV presents policy directions for structural transformation and productivity enhancement of the service industry in response to the evolving domestic and external environment, building on the preceding discussion.

Ⅱ. Has Korea's Service Industry* Achieved Both Quantitative and Qualitative Growth?

* Analysis focusing on the private sector excluding public administration, defense, and real estate sectors

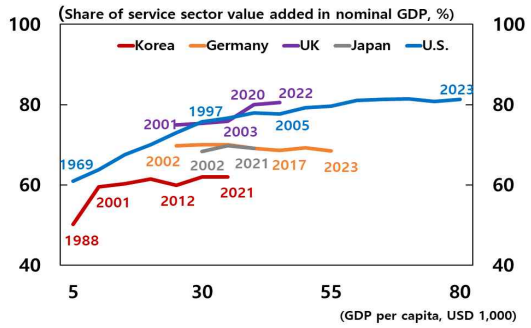
1. Quantitative Growth: With a Focus on Economic Scale and Employment

The increasing share and advancement of the service sector is a structural change commonly observed in economic development.[3] Korea is no exception; despite maintaining a growth strategy centered on production and exports in manufacturing, the country has undergone a structural shift in which the private service sector has expanded its share of the economy to a greater extent than manufacturing. Since the 1990s, the share of manufacturing value added in nominal GDP has stagnated in the upper-20% range, whereas the share of services value added has steadily increased and has reached 44% of nominal GDP as of 2024. In terms of employment, the share of manufacturing in total employment peaked at 28% in 1989 and has since steadily declined, while the share accounted for by the service sector has risen to 65% of the total in 2024.[4] In particular, since the 1990s, the service sector has consistently made the largest contribution to employment growth and has played a pivotal role in job creation.

3) From 1970 to 2024, Korea's economy expanded nearly 30-fold in real GDP terms. During this period, manufacturing grew 95-fold, while the private service sector—excluding the public sector—expanded 38-fold. In employment terms, total employment almost tripled, with manufacturing employment rising 3.5-fold and private service employment increasing 6.5-fold.

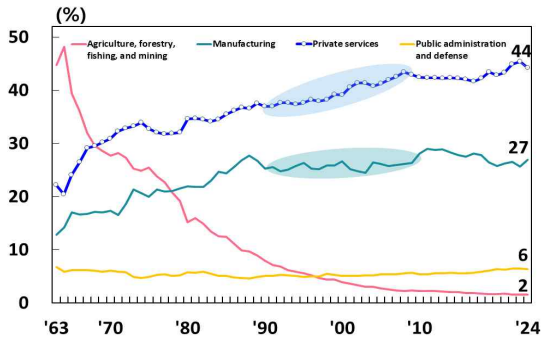
4) This figure is based on the private service sector, excluding public administration, defense, and real estate activities.

[Figure 1] Share of the Service Sector by Economic Development Stage



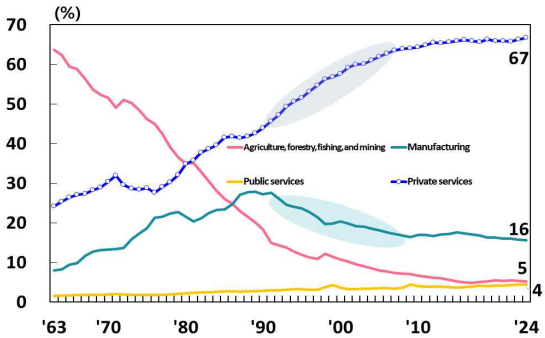
Note: 1) Based on the entire service sector
Source: Choi et al. (2025)

[Figure 2] Trends in the Share of Nominal Value Added by Sector



Source: National accounts

[Figure 3] Trends in Employment Share by Sector

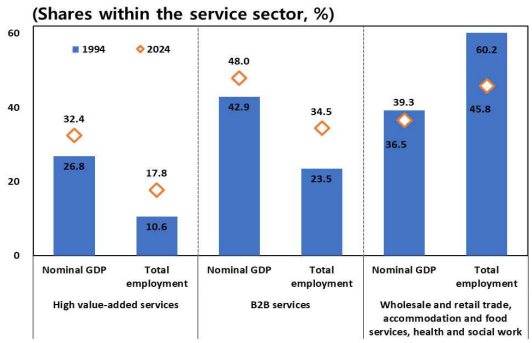


Note: 1) Private services include real estate due to limitations in the revised industrial classification.
Source: Economically Active Population Survey

The structure of the service industry has been steadily evolving in terms of value added, driven by high value-added and business-to-business (B2B)[5] sectors. However, in terms of employment, it still remains concentrated in traditional business–to- consumer (B2C) sectors, reflecting transitional characteristics. High value-added services such as information and communication, finance and insurance, and professional, scientific and technical services increased their share of value added within the service sector from 26.8% in 1994 to 32.4% in 2024, while their employment share rose from 10.6% to 17.8% over the same period. The share of B2B services in value added increased from 42.9% to 48.0%, and their share in employment grew from 23.5% to 34.5%, indicating a gradual expansion of their weight within the service sector. However, low value-added B2C services, such as wholesale and retail trade, accommodation and food services, and health and social work activities, still account for nearly half of total service sector employment, suggesting that structural transformation in employment has proceeded relatively slowly.

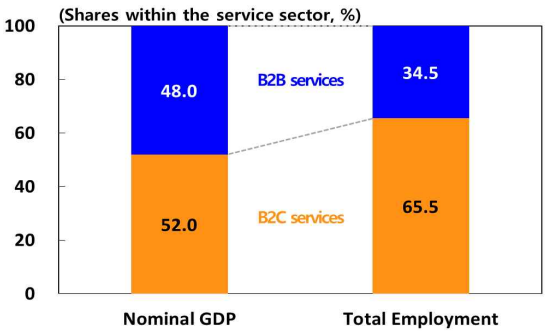
5) The service sector can be classified into business-to-business(B2B) and business -to-consumer(B2C) services according to the target recipient. In general, B2B services function as intermediate inputs in the production processes of other industries, whereas B2C services operate as final consumption goods and are closely linked to the domestic market.

[Figure 4] Changes in Shares by Sector



Note: 1) B2B services: transportation and storage, ICT, finance and insurance, professional, scientific and technical services, and business support services
Sources: National accounts, Economically Active Population Survey

[Figure 5] Shares of B2B&B2C Services (2024)

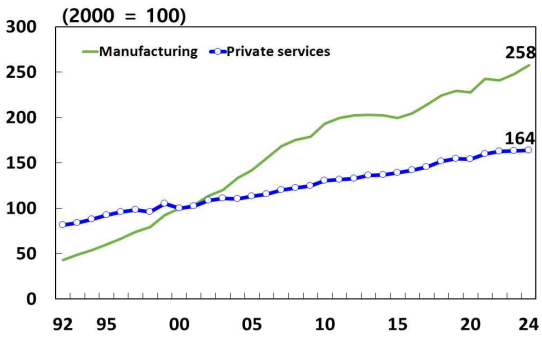


Note: B2B services: transportation& storage, ICT, finance&insurance, professional, scientific&technical services, business support services
B2C services: Wholesale&retail trade, accommodation&food services, education, health& social work, cultural &personal services
Sources: National accounts, Economically Active Population Survey

2. Qualitative Growth: With a Focus on Labor Productivity per Worker

Per-worker labor productivity[6][7], a key indicator for evaluating the efficiency of the industrial structure, shows that **Korea's service sector has exhibited structurally entrenched low productivity over the past three decades.** Since 1995, service sector productivity has fallen behind that of manufacturing, and its pace of improvement has remained sluggish. Over the past 20 years, service sector productivity has remained at around 40% of manufacturing, and compared to countries with manufacturing-centered industrial structures such as Japan and Germany, Korea displays an even more pronounced productivity imbalance between sectors.

[Figure 6] Trends in Labor Productivity

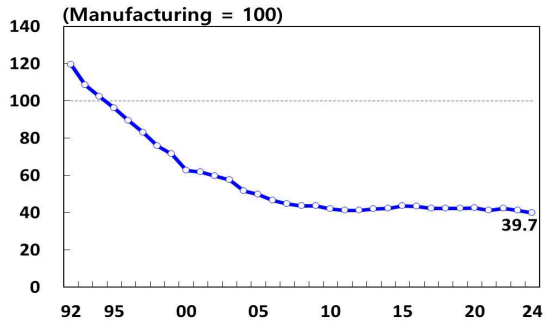


Note: 1) Based on per-worker labor productivity
Sources: National accounts, Economically Active Population Survey

6) Labor productivity provides an intuitive measure of resource efficiency by capturing the value added per unit of labor input. The more smoothly resources are reallocated toward high-productivity sectors, the higher the economy's average labor productivity, indicating an efficiently functioning industrial structure. Moreover, because labor productivity reflects structural characteristics such as technological capacity, organizational innovation, and capital utilization, it serves as a key indicator for diagnosing whether resources are excessively concentrated in particular industries or whether structural transformation is being delayed.

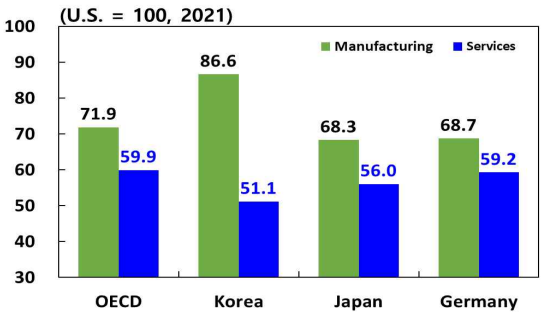
7) The choice between labor productivity per worker and per hour worked as the preferred indicator of productivity measurement depends on each country's labor market structure and institutional context. In general, productivity per hour worked is regarded as the more appropriate measure, as total working hours more accurately capture actual labor input. This is particularly the case in flexible labor markets, where wages and working hours can be adjusted readily. By contrast, in contexts characterized by labor market rigidity or institutional constraints, productivity per hour worked may be temporarily distorted. In Korea, labor input and wages have traditionally been determined primarily on a head-count basis. Accordingly, productivity per worker may serve as a more intuitive and policy-relevant indicator, given its close linkage with employment, wages, and labor costs.

[Figure 7] Labor Productivity Gap Between Manufacturing and Services



Note: 1) Based on per-worker labor productivity
Sources: National accounts, Economically Active Population Survey

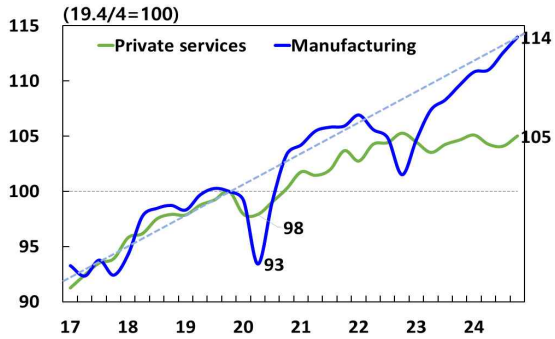
[Figure 8] Comparison of Labor Productivity by Country and Sector



Notes: 1) Based on per-worker labor productivity and PPP-adjusted USD
2) Based on the entire service sector
3) The OECD average excludes Türkiye and Australia.
Source: Korea Productivity Center

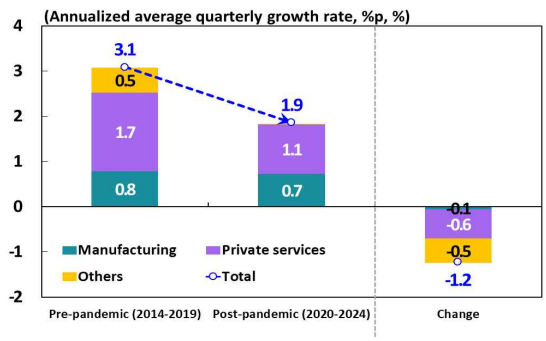
Low productivity in the service sector has long been recognized as a structural factor constraining the growth potential of the Korean economy, and this pattern has persisted even after the pandemic. **Since the pandemic, Korea's economic growth rate has declined markedly compared with pre-pandemic levels, and this slowdown has been driven largely by stagnant productivity in the private service sector.** An analysis of labor productivity by industry before and after the pandemic shows that while manufacturing labor productivity temporarily experienced a sharp decline, it quickly rebounded and resumed its previous growth trajectory. In contrast, productivity in the private service sector has not recovered its pre-pandemic trend and has remained stagnant since 2023. This pattern is also evident when viewed in terms of growth contribution. A comparison of the average annual contribution to economic growth by industrial sector before and after the pandemic (2014–2019 vs. 2020–2024) shows that manufacturing's contribution remained broadly stable at around 0.7–0.8%p, whereas that of the private service sector declined sharply from 1.7 to 1.1%p. A decomposition of the causes behind this decline indicates that the main factor was stagnant labor productivity rather than reduced employment.

[Figure 9] Trends in Labor Productivity



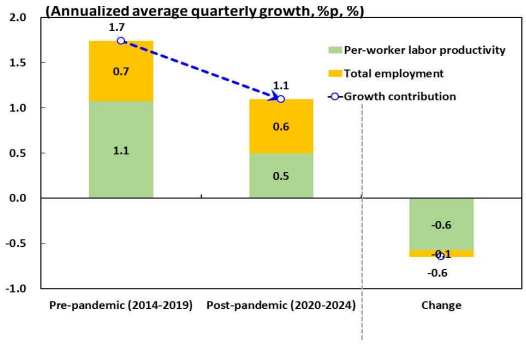
Sources: National accounts, Economically Active Population Survey

[Figure 10] Growth Contributions by Sector



Source: National accounts

[Figure 11] Breakdown of Service Sector Growth Contribution



Sources: National accounts, Economically Active Population Survey

The examination of productivity in the service sector, categorized into high and low value-added industries, shows that in high value-added services, productivity rose temporarily during the early phase of the pandemic but gradually shifted to a downward trend, and has recently fallen below its long-term trajectory. In the early phase of the pandemic, labor productivity temporarily rose as demand for contactless services expanded, despite a contraction in labor supply driven by infection concerns and quarantine measures. In particular, the finance and insurance sector experienced a sharp productivity increase through mid-2022, fueled not only by the shift to non-face-to-face operations but also by booming asset markets supported by stimulus measures in major countries. Since 2023, productivity in this sector has stagnated, but it still remains at a relatively high level. Meanwhile, productivity in ICT and in professional, scientific, and technical services rose temporarily during the early phase of the pandemic due to surging online demand, but turned downward in 2021 and, since the second half of 2022, has remained below pre-pandemic levels, reflecting continued sluggishness.

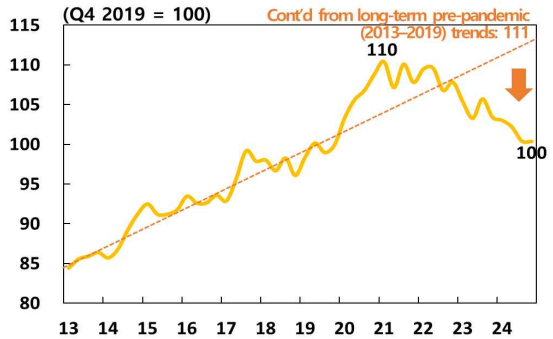
A decline in labor productivity per worker can occur either when the effective labor supply per worker decreases (through a reduction in working hours) or when the structural fundamentals of productivity weaken (through a decline in productivity per hour worked). Analysis indicates that the post-pandemic decline in productivity in Korea's high value-added service sectors is primarily attributable to structural factors, specifically a deterioration in the efficiency of the production structure.[8)9)] To be more specific, the contribution of production structure efficiency (measured by productivity per hour worked) to changes in labor productivity per worker declined sharply from 2.4%p in 2014–2019 to just 0.1%p in 2020–2024. This stands in sharp contrast to the United States, where productivity improvements, led by high-tech service industries, continued even after the pandemic.[10)] Although the post-pandemic rise in external demand, such as in IT and AI, created opportunities for high value-

8) (Labor productivity per worker) = (average working hours) × (labor productivity per hour worked). This expression is an identity that decomposes labor productivity per worker into the product of average working hours and hourly labor productivity. Average working hours represent the amount of labor supplied by a worker over a given period, while hourly labor productivity reflects the value of output produced per unit of time and captures the structural fundamentals of the economy, such as technology, capital accumulation, and organizational efficiency. Assuming hourly labor productivity remains constant, an increase in average working hours raises total labor input and thereby increases labor productivity per worker. This mechanism is analogous to the way in which a higher capacity utilization rate leads to greater output.

9) Trends in average working hours by industry are presented in Box 2(Trends in Average Hours Worked by Industry).

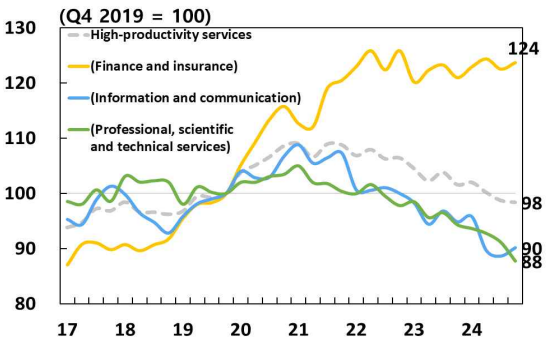
added service sectors, Korea appears to have failed to sufficiently translate these opportunities into stronger productivity fundamentals. This decline in productivity is closely linked to structural constraints in non-labor input factors, including weak accumulation of human and physical capital, stagnation in technology adoption, and the underutilization of labor and resources in high value-added services.

[Figure 12] Trends in Production Efficiency of High Value-Added Services



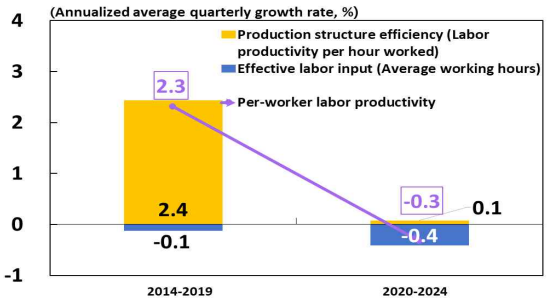
Note: 1) Based on labor productivity per hours worked
Sources: National accounts, Economically Active Population Survey

[Figure 13] Trends in Labor Productivity by Sector: High Value-Added Services



Source: National accounts, Economically Active Population Survey

[Figure 14] Decomposition of the Factors Behind Productivity Changes in High Value-Added Services



Sources: National accounts, Economically Active Population Survey

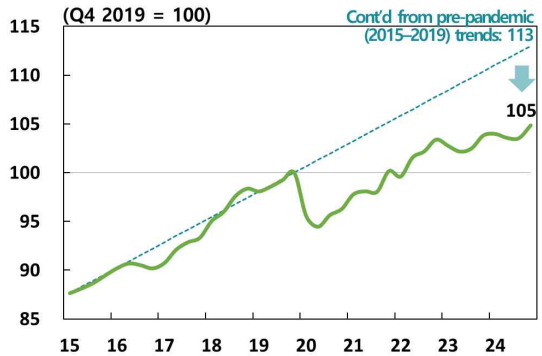
Productivity in low value-added service sectors plummeted in the immediate aftermath of the pandemic shock and, while it has been gradually recovering, still remains about 7% below past trends. Wholesale and retail trade, as well as transportation and storage, saw a temporary improvement in productivity due to the expansion of online consumption and non-face-to-face transactions, but this has slowed since 2023. In major labor-intensive sectors such as accommodation and food services, business support services, and health and social work activities, productivity plunged in 2020 and has since stagnated at levels even lower than before the pandemic.

The slowdown in productivity in low value-added sectors stemmed from a reduction in average working hours—driven by external factors such as the full implementation of the 52-hour workweek and the increase in part-time employment—without corresponding improvements in production structure efficiency to offset the decline. In these sec-

10) For further details, see Box 3(Drivers of Post-Pandemic Productivity Growth in the U.S.: Business Dynamics in High-Tech Services).

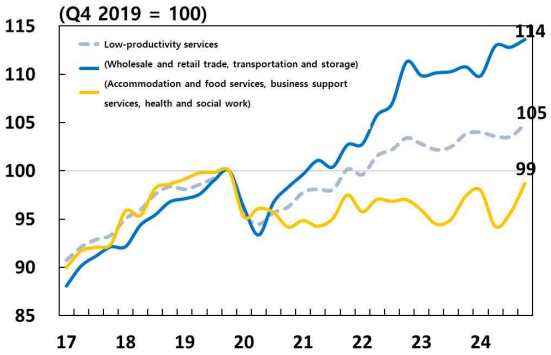
tors, the decline in working hours was driven less by endogenous factors such as automation and technological innovation, and more by exogenous factors including institutional changes, the spread of part-time employment, and a reduction in the number of self-employed workers. Although the reduction in working hours due to external shocks was foreseeable, efforts to offset labor shortages or raise hourly productivity through capital investment and technological adoption have remained insufficient. In particular, given the inherently high labor dependence of these sectors, it is difficult to fully substitute labor with capital, creating structural constraints whereby reductions in labor input directly lead to stagnant productivity. Consequently, the recent slowdown in productivity should be understood not merely as the outcome of temporary shocks, but as the combined result of sector-specific limitations and inadequate structural responses.

[Figure 15] Trends in Labor Productivity of Low Value-Added Services



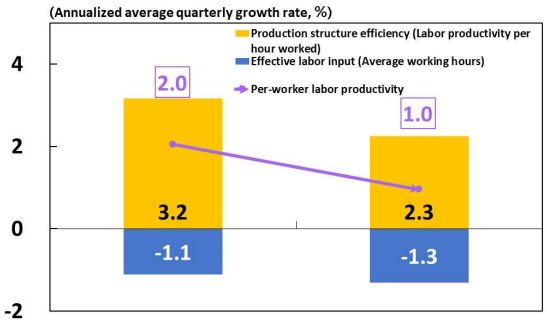
Sources: National accounts, Economically Active Population Survey

[Figure 16] Trends in Labor Productivity by Sector: Low Value-Added Services



Sources: National accounts, Economically Active Population Survey

[Figure 17] Decomposition of the Factors Behind Productivity Changes in Low Value-Added Services



Sources: National accounts, Economically Active Population Survey

Ⅲ. What Are the Structural Factors Constraining Service Industry Productivity?

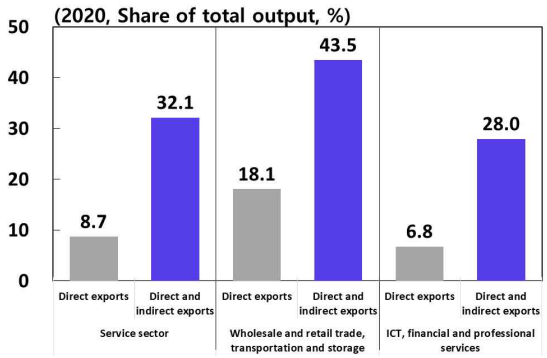
Taking into comprehensive account the service industry structure shaped over the medium to long term, together with recent domestic and external conditions, the structural weaknesses constraining productivity improvement in Korea's service sector are evident in three dimensions: ① **its perception as merely a supporting sector for manufacturing, a regulated industry, and a pro-**

vider of public goods; ②in high value-added services, over-reliance on domestic demand and the public sector, coupled with insufficient innovation; and ③ in low value-added services, distorted firm dynamics characterized by persistent low-productivity churn among livelihood –oriented self-employed individuals.

① Perceptions of Services: Supporting Manufacturing, Regulated Industry, and Public Good Provider

Since industrialization, Korea's service sector has been largely oriented toward complementary functions supporting the manufacturing sector's production and export activities—such as logistics, transportation, finance, and distribution. This reflects the government's longstanding strategy, dating back to the early stages of economic development, of positioning manufacturing as the central pillar of growth and concentrating policy resources accordingly.[11] As a result, the service sector was relegated to a secondary position in industrial policy and perceived as a derivative of manufacturing, lacking an independent growth strategy of its own. This structural feature is also evident in estimates of export-linked production. According to balance of payments data, the share of direct service exports in total output remains relatively low, at about 9% as of 2024. However, analysis based on the Inter-Country Input-Output Table (ICIO), which reflects inter-country and inter-industry transactions, shows that when indirect exports supporting manufacturing exports are included, the combined volume of direct and indirect service exports amounted to **about 32% of total service output in 2020**. This underscores that a substantial share of service sector production is **directly or indirectly linked to exports.**[12] Notably, a large share of Korea's direct service exports is likely generated not by demand from local consumers, but by services supporting the production activities of Korean manufacturing firms operating abroad. Moreover, the associated activities are **largely concentrated in low value-added sectors** such as wholesale and retail trade, transportation, and storage. As a result, the value-added ratio of Korea's service sector (relative to total output) remains relatively low compared with that of major economies.

[Figure 18] Share of Export-Linked Output in Total Service Sector Output

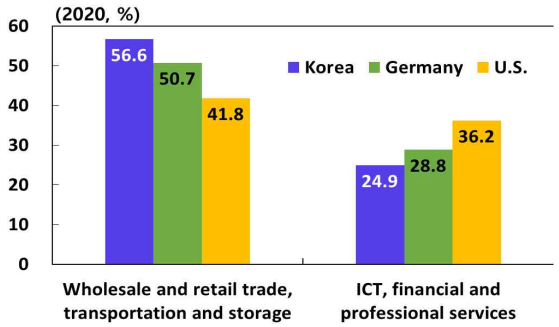


Sources: OECD ICIO

11) Manufacturing has been a central driver of Korea's economic growth—from the Five-Year Economic Development Plans of the 1960s, through heavy and chemical industrialization in the 1970s, the promotion of high-tech industries in the 1980s, and more recently, the upgrading of manufacturing via digital transformation. Throughout these stages, the government has consistently extended strong policy support to the sector.

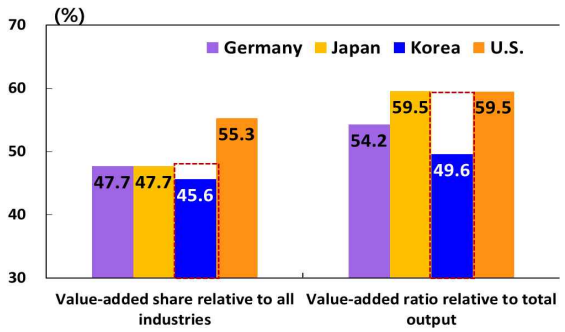
12) The concept of direct and indirect exports encompasses not only direct exports recorded under customs clearance criteria, but also domestic production activities that are initially classified as domestic demand yet ultimately contribute to exports after multiple stages of processing, being utilized in the production of final goods abroad. For the definition and calculation methodology of direct and indirect exports, see Jung et al.(2024).

[Figure 19] Share of Service Production Linked to Manufacturing Exports by Sector



Source: OECD ICIO

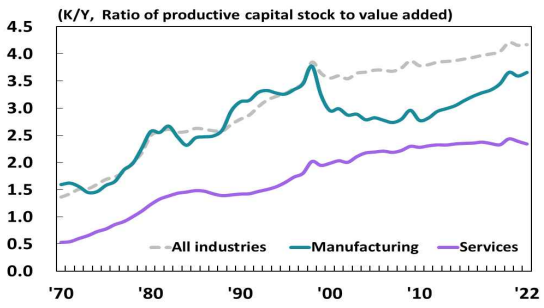
[Figure 20] Value-Added Ratio of the Service Sector(2020)



Source: OECD ICIO

In addition, the service sector has a structural characteristic in which industrial and social policies overlap, as it simultaneously encompasses areas linked to public interest such as healthcare and education as well as market-driven services based on private consumption. **In Korea, the service sector has traditionally been recognized more as part of welfare and daily life than as a source of economic growth. Consequently, policies have mainly focused on regulation and reinforcing public interest, rather than improving productivity.** Moreover, service sector policies are fragmented across multiple ministries[13], and the absence of a dedicated authority to coordinate them makes it difficult to systematically design strategic policies and pursue industrial development in response to changing domestic and global conditions. **Such a policy environment has dampened private sector incentives for capital investment and, as a result, the service sector has failed to achieve sufficient upgrading, remaining locked in a labor-intensive structure.** Indeed, the service sector accounts for about two-thirds of total employment, reflecting its high reliance on labor input, while its level of capital accumulation remains relatively low. Moreover, the service sector's investment rate has continued to decline since the Asian financial crisis, and the capital market is still heavily skewed toward manufacturing, underscoring the persistent weakness of capital accumulation fundamentals in services. This is in sharp contrast to the United States, where many of the largest market capitalization companies are IT-based service providers.

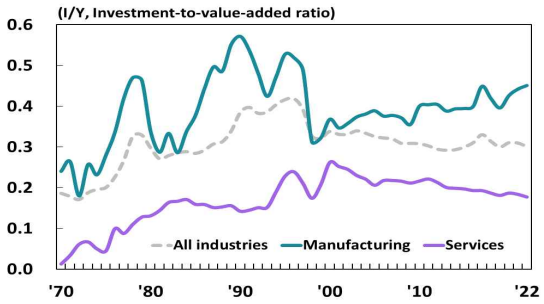
[Figure 21] Capital Intensity (K/Y)



Source: National accounts

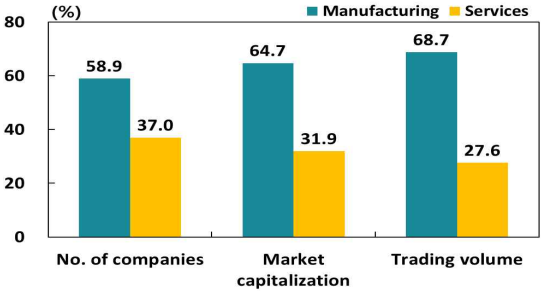
13) Policies related to the service sector are fragmented across multiple ministries, including the Ministry of Economy and Finance; the Ministry of Health and Welfare(medical services); the Ministry of Science and ICT; the Ministry of Education(education services); the Ministry of Culture, Sports and Tourism(tourism and content); and the Ministry of SMEs and Startups (micro-enterprises and franchising).

[Figure 22] Investment-to-Value-Added Ratio (I/Y)



Source: National accounts

[Figure 23] Capital Market Structure



Note: 1) As of April 2025
2) Services include real estate activities
3) Figures include all companies listed on KOSPI and KOSDAQ.

Source: KRX

② **High Value-Added Service Sectors: Excessive Reliance on Domestic Demand and the Public Sector, and Weak Innovation**

Korea's high value-added service sectors have grown largely by relying on relatively stable demand—such as contracts from large corporate affiliates or government-initiated projects (Business-to-Government, or B2G)—rather than through open market competition. Furthermore, they lack sufficient institutional and environmental foundations to support exports, leaving the structure heavily dependent on domestic demand. Historically, many countries have also shown the pattern of the service sector being predominantly oriented toward domestic demand. However, in contrast to major advanced economies, where high value-added service firms are rapidly expanding their presence in global markets[14], only 2.2% of Korea's knowledge-intensive service[15] firms had any experience entering overseas markets as of 2021. Furthermore, nearly 98% of total corporate sales are concentrated in domestic demand, encompassing transactions with the government, public institutions, domestic firms, and consumers.[16] Under such a structure, incentives to strengthen capabilities through market competition or to expand business overseas tend to be relatively weak. In addition, the institutional and environmental conditions required to support export fundamentals are still insufficient. Many Korean companies are small and dispersed[17], lacking not only organizational ca-

14) In Korea, the export shares of charges for the use of intellectual property and of financial and insurance services remain relatively low—not only compared with the U.S. and the UK, but also with Germany and Japan, whose export structures are largely manufacturing-based. In particular, for charges for the use of intellectual property, major advanced economies such as the U.S., Japan, Germany, and the UK have consistently accounted for more than half of the global market, while Korea's share was only 1.9% as of 2023. In professional and management consulting, English-speaking countries including the U.S., the UK, and India hold dominant market positions. Meanwhile, China and India record relatively high export shares in information and communication services by absorbing outsourcing demand on the basis of lower labor costs. China, in particular, has been rapidly expanding its global market share in this area(Choi et al., 2025).

15) The knowledge-intensive service industry generates value added through the production, processing, utilization, and distribution of knowledge. It comprises ICT-based knowledge services, content-related knowledge services, and professional knowledge services, and employed approximately 1.48 million workers as of 2023(Lee&Park, 2023).

16) According to the 2022 Survey on the Knowledge-Intensive Service Industry, 22% of the domestic B2B sales of knowledge-intensive service companies were derived from intra-affiliate transactions.

17) According to the 2020 Service Sector Survey, the average number of employees per establishment

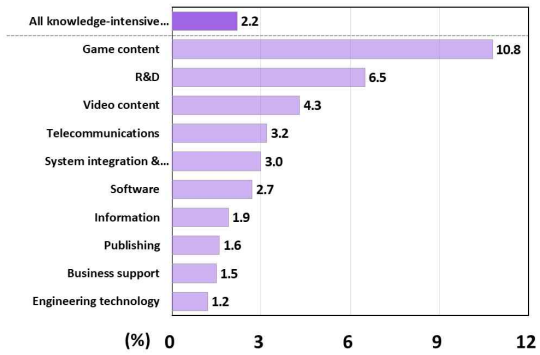
pabilities and capital accumulation, but also the broader foundations required for global expansion, such as a skilled workforce and adequate financial infrastructure. At the same time, domestic regulatory intensity remains high[18], and the considerable gap with international standards increases institutional uncertainty and transaction costs in the process of entering overseas markets.

[Table 1] Scale of the Knowledge-Intensive Service Industry by Transaction Type

(KRW Trillion, %)	Total	(B2G)	(B2B) Companies		(B2C) Consumers	
		Gov't/ Public	Domestic	Overseas	Domestic	Overseas
Sales	311.6	36.3	205.9	5.1	62.8	1.4
Share	100	11.7	66.1	1.6	20.1	0.5

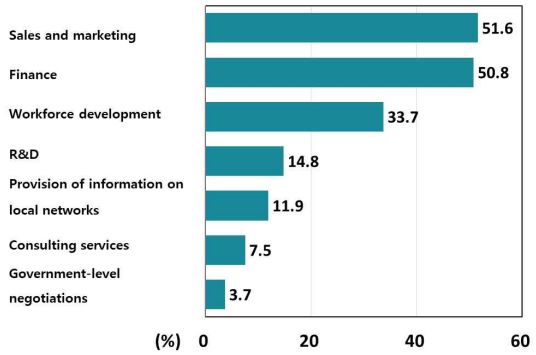
Sources: Lee&Park(2023)

[Figure 24] Overseas Market Entry Experience of Knowledge-Intensive Service Companies



Note: Based on the 2021 survey (147,116 companies surveyed)
Source: Survey on the Knowledge-Intensive Service Industry

[Figure 25] Difficulties Encountered by Knowledge-Intensive Service Companies in Entering Overseas Markets



Note: Based on the 2021 survey, with multiple responses allowed
Source: Survey on the Knowledge-Intensive Service Industry

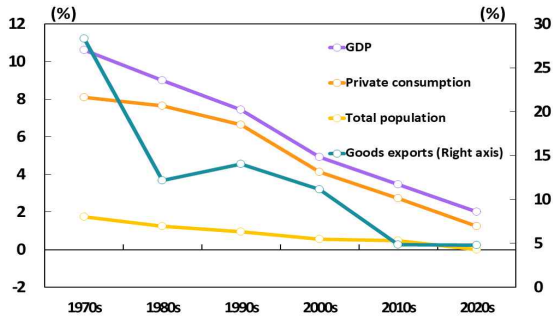
In the past, the above constraints were partially offset by the swift expansion of the domestic market, driven by rapid population growth and high economic growth. However, since the 2010s, the domestic demand base has been structurally weakened due to the slowing pace of population growth and declining growth rates. This has been further compounded by a slowdown in global trade and stagnation in manufacturing exports resulting from China's rise, further constraining domestic consumption capacity. **Amid the shrinking demand base, high value-added service sectors, which are increasingly becoming tradable through digitalization, require advanced expertise and large initial capital to transform their business models.** However, domestic companies dependent on the local market face difficulties in securing profitability due to the limited market size,

in professional, scientific, and technical services was 6.3, with 71.7% of establishments employing fewer than five workers and 39.3% reporting annual sales of less than KRW 100 million.

18) According to the 2024 OECD Services Trade Restrictiveness Index(STRI), Korea recorded relatively high scores in high value-added service sectors such as law, accounting, and telecommunications, reflecting stringent regulations on foreign entry into the domestic market. Such a closed market structure not only impedes the diffusion of innovative business models, but may also indirectly undermine domestic firms' incentives to expand abroad and their capacity to strengthen international competitiveness.

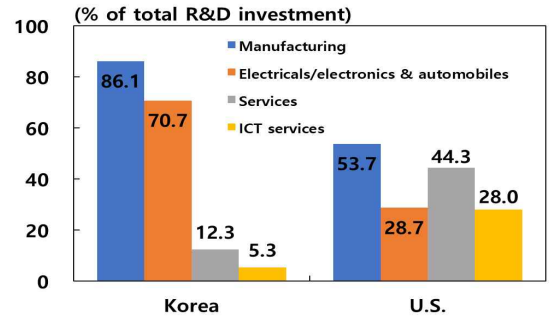
which in turn makes it challenging for them to undertake large-scale investments. Especially since the pandemic, **the accelerated global integration of service markets, together with the rapid entry of global Big Tech companies into the Korean market[19], has placed domestic high value-added service providers under dual pressure: a shrinking domestic demand base and intensifying competition.**

[Figure 26] Growth Trends of Key Macroeconomic Indicators



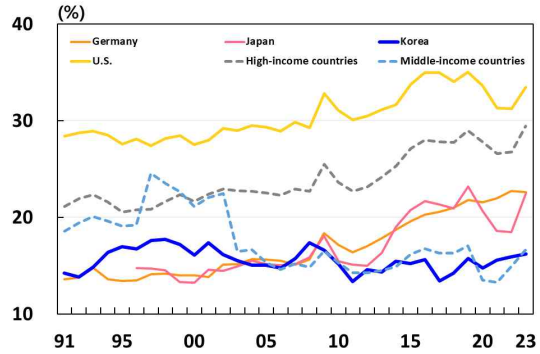
Note: Average annual growth rate by period
Sources: National accounts, Population Projections

[Figure 27] Sectoral Share of R&D Investment



Note: 1) Based on the 2021 survey
2) Services include real estate activities
Source: OECD ANBERD Database

[Figure 28] Share of Services in Total Exports



Note: Based on total services
Source: World Bank WDI

③ Low Value-Added Service Sectors: The Trap of Small-Scale Self-Employment

Even before the pandemic, low productivity was a structural problem in low value-added service sectors, though they managed to maintain a certain level of growth by expanding labor input. During periods of sustained population growth, quantitative employment expansion partially offset this low productivity. However, **since Korea entered a phase of population decline around 2020[20], this labor-input-driven growth model has reached its limits, and the structural constraints of low value-added sectors have become increasingly evident.**

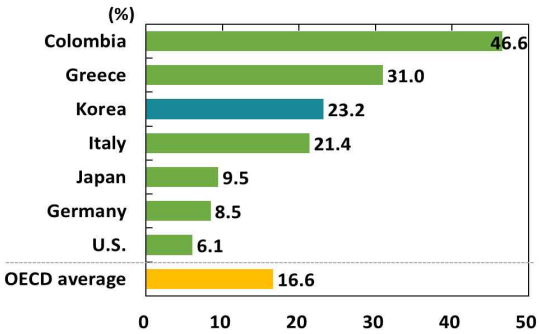
The low productivity of low value-added service sectors originates from structural constraints that have prevented the sufficient development of a foundation for quality jobs. Consequently, groups with limited ac-

19) In Korea's digital services market, global Big Tech firms have already established significant dominance in areas such as software, mobile operating systems, app marketplaces, and digital advertising. More recently, their presence has expanded rapidly into major digital platforms—including cloud services(with an 80% market share in 2023), OTT services (60% for Netflix alone in 2024), and music streaming (51% in 2024)—as well as into emerging business fields such as generative AI. In particular, global AI services such as ChatGPT have rapidly scaled up their user base in Korea, indicating a widening influence across the broader tech ecosystem.

20) Korea's total population peaked at 51.82 million in 2020 and has since begun to decline, while the working-age population(ages 15-64) has been shrinking since 2018. Moreover, the total fertility rate fell to just 0.75 in 2024—the lowest in the world. With the decline in the total population becoming more pronounced, alongside the contraction of the working-age population and the

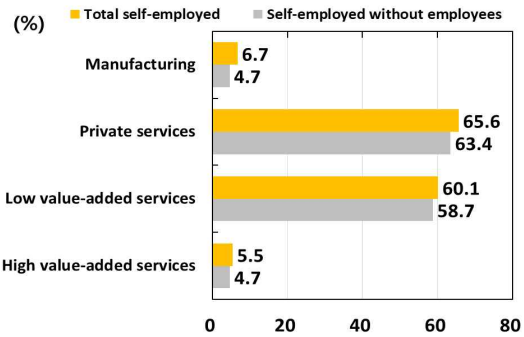
cess to quality employment—such as elderly retirees—have increasingly turned to self-employment as an unavoidable means of livelihood.[21] This trend is particularly pronounced in daily-life service sectors with low entry barriers and minimal initial capital requirements—such as restaurants and food services, retail, and transportation and storage. As of 2024, 60% of the self-employed are engaged in low value-added service sectors[22], and among them, 73% run single-person businesses without employees, further entrenching the predominance of small-scale operations.

[Figure 29] Share of the Self-Employment in Total Employment(2023)



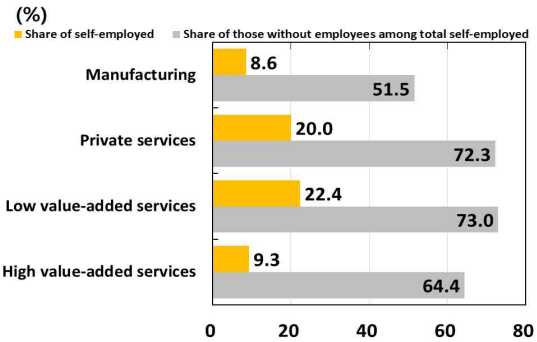
Note: 1) Including unpaid family workers
Source: OECD

[Figure 30] Sectoral Distribution of the Self-Employed(2024)



Source: Economically Active Population Survey

[Figure 31] Sectoral Share of Self- Employment in Total Employment(2024)



Source: Economically Active Population Survey

The problem lies in the fact that the industrial structure centered on small-scale self-employed businesses leads to a cycle of repeated entry and exit limited to small-scale self-employed workers, making it difficult to achieve economies of scale. This, in turn, exacerbates inefficiencies in resource allocation and persistently constrains corporate growth and job creation. As of 2024, small-scale businesses with fewer than 10 employees accounted for 95% of total service sectors,[23] and approximately 85% of

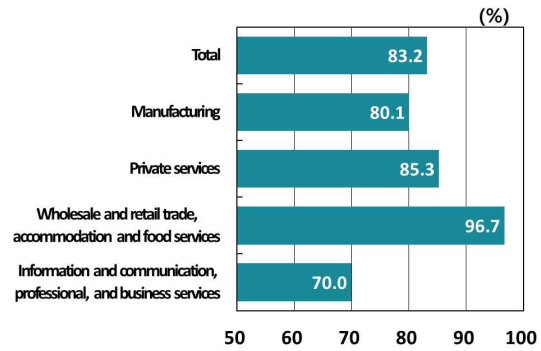
persistence of ultra-low fertility, the Korean economy is assessed to have gradually entered a demographic decline since around 2020.

21) For a detailed analysis, see Lee et al.(2025).

22) Korea has a relatively high share of self-employed workers given its level of economic development. As of 2023, Korea ranked seventh among OECD member countries in terms of self-employment, with only countries such as Colombia, Mexico, Greece, Türkiye, and Chile—generally lower-income economies—recording higher shares.

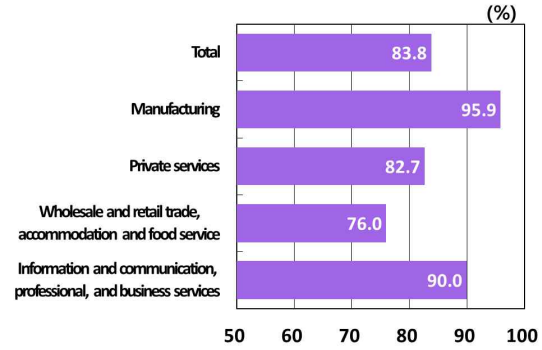
service industry workers were employed by small and medium-sized enterprises (SMEs; defined as businesses with fewer than 300 regular employees),[24] indicating a high overall dependence on SMEs in the service sector. By sector, B2C sectors such as wholesale and retail trade as well as accommodation and food services exhibit higher SME dependency and greater employment instability compared to B2B sectors. This structural dominance of self-employment and small-scale SMEs hinders economies of scale and leads to a "revolving-door competition," a cycle of repeated entry and exit among small-scale businesses alone. Ultimately, this structurally constrains the foundation for corporate growth, efficient resource reallocation, and job creation.

[Figure 32] Employment Share in SMEs(2024)



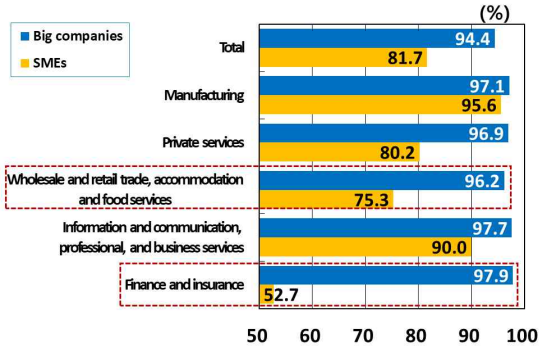
Note: 1) For wage workers
Sources: Labor Force Survey at Establishments

[Figure 33] Share of Regular Employees(2024)



Note: 1) For wage workers
Sources: Labor Force Survey at Establishments

[Figure 34] Share of Regular Employees by Company Size(2024)



Note: 1) For wage workers
Sources: Labor Force Survey at Establishments

IV. What Policy Direction Should Korea Pursue for Its Service Industry?

To enhance the productivity of Korea's service industry through structural transformation and connect this to an expansion of the economy's overall growth potential, policy efforts should concentrate on three directions: (1) establishing the service industry's identity as a strategic sector through

23) Based on the National Establishment Survey

24) The Establishment Labor Force Survey conducted by Statistics Korea, as cited in this report, measures employment in business establishments with paid workers—including regular employees, temporary and daily workers, and workers in special types of employment. It excludes single-person self-employed workers without employees as well as unpaid family workers.

legal and institutional reforms; (2) expanding exports of high value-added services through manufacturing–service convergence; and (3) achieving economies of scale in low value-added sectors by revitalizing business dynamics.

① The First Step Toward Strategic Industrialization: Legal and Institutional Reform

To guide the service sector's evolution beyond its traditional perception as a domestic, low value-added industry and toward a tradable, high value-added sector, it is essential to define it clearly as a strategic industry for national economic growth and to first establish legal and institutional foundations that reflect its changing characteristics. The "Support Measures for Productivity Innovation in the Service Industry," announced in 2024, is regarded as a significant step forward, as it moves away from fragmented, sector-specific policy approaches and instead categorizes services into two groups—manufacturing-linked intermediate services and independent consumer services—while presenting differentiated policy directions based on this classification. Broader policies—including market creation, export expansion, regulatory reform, and integration with new industries—need to be designed in a comprehensive manner within an institutional framework that reflects the structural transformation of the service industry.

To this end, it is necessary to establish an overarching legal framework for industrial policy that encompasses the convergence of manufacturing and services. In particular, the current regulatory system should be redesigned as an open and flexible policy platform through bold deregulation, so as to accommodate emerging industries and convergent services that existing rules cannot adequately cover. The Framework Act on the Development of the Service Industry, which is currently under legislative review, is expected to provide the legal foundation to fulfill this role. For the proposed bill to function effectively as an overarching legal framework, it is essential to establish a governance system that can coordinate policy conflicts across ministries and to clarify the legal foundation for building common systems such as digital infrastructure, standardization, and data linkage. Additionally, the systematic reform of regulations that impede convergence should be substantially incorporated into forthcoming legislation. Furthermore, in areas where public interest is critical—such as healthcare and education—the direction of digital transformation should be clearly defined on the premise of safeguarding the public interest, taking into account social concerns over privatization. For promising areas such as digital healthcare and remote education, a desirable approach would be to pursue public–private partnerships (PPPs) in tandem with strategic investment.

② High Value-Added Service Sectors: Export Strategies Leveraging Manufacturing Strengths

The manufacturing and service sectors both face clear limitations in achieving stable expansion of their export bases through

separate approaches. The manufacturing sector has long driven exports based on technological capabilities and price competitiveness, but given the recent reorganization of global supply chains and intensified competition for technological supremacy, it is becoming increasingly difficult to secure a sustainable foundation for growth through product-centric strategies alone. In addition, although digital transformation has expanded the export potential of the service industry, limitations remain with respect to profitability and differentiation, given the ease of replicating intangible assets and the low cost of switching. In this context, **the convergence of manufacturing and services complements the structural limitations of both sectors and is emerging as a strategic means of broadening export competitiveness. Accordingly, service export strategies should also be formulated within this framework.**

Korea's manufacturing capabilities and field-based data, accumulated in advanced industries such as semiconductors, batteries, and precision machinery where Korea has a competitive edge, hold strong potential to be transformed into AI- and data-driven industrial services when combined with digital technologies. These industrial services may go beyond simply enhancing efficiency in manufacturing processes and instead reconfigure the knowledge assets embedded in manufacturing into high value-added services, evolving into new business models that expand export potential. Although Korea lags behind leading countries in AI source technologies, it has favorable conditions to secure a comparative advantage in industrial services, drawing on applied capabilities tailored to manufacturing environments and high-quality data infrastructure. This could serve as a strategic turning point for extending Korea's manufacturing competitiveness into service-based assets and diversifying its high value-added export base.

In addition, promising service sectors with high global demand—such as content and healthcare—can strengthen their export competitiveness through convergence with manufacturing.[25] For instance, through the "content+1 strategy," the content industry can create a new export base by raising consumer switching costs and enhancing brand loyalty through integration with various physical industries such as smart devices, tourism, and beauty. Likewise, the healthcare industry can expand into export-oriented service models by converging with diagnostic devices, wearables, and digital health platforms. In particular, an integrated package strategy combining complex services such as hospital systems, medical devices, and telemedicine can serve as an effective approach to entering developing markets with strong demand for medical infrastructure. This kind of convergence-driven export strategy, where the limitations of intangible services are complemented by interfaces with tangible elements and services are linked with assets from the manufacturing sector, is considered a new, high-value growth pathway for the Korean economy.

25) For further details, see Box 4(Promising Services and Manufacturing Linkages: Gaming, Content, Healthcare).

③ Low Value-Added Service Sectors: Transition of Livelihood-Oriented Self-Employed to Wage Employment and Realization of Economies of Scale

Low value-added services in the service sector mainly comprise labor-intensive, face-to-face industries such as nursing, caregiving, and accommodation and food services. Given the non-standardized nature of such work, automation through capital or technology is structurally difficult. In these industries, capital is most effective when deployed as a complementary means to enhance productivity rather than as a substitute for labor. **However, the entrenchment of an industrial structure centered on small-scale self-employment has restricted access to capital and hindered the smooth scaling-up of businesses.** As a result, the delayed exit of low-productivity firms, coupled with a shortage of quality jobs, has triggered repeated entry into livelihood-oriented self-employment and weakened the overall dynamism of the sector.

To address these structural limitations, it is more desirable to gradually adjust the self-employment–centered structure by fostering an environment where firms with high productivity and strong growth potential can enter and grow smoothly in the market, thereby promoting the creation of quality jobs, rather than directly reducing the scale of self-employment. To this end, policies that improve access to capital and promote the formalization of enterprises should be implemented in tandem. For example, encouraging the incorporation of SMEs, expanding the share of directly operated stores to strengthen responsible franchise management, and fostering cooperative-based business models can help reduce the risks faced by the self-employed in starting a business and enhance employment stability. In addition, it is essential to ease regulations and expand tailored financial support for innovative service firms, while systematically establishing exit strategies—such as business closure assistance, retraining, and career transition programs—to alleviate the transition costs faced by the self-employed. To this end, strengthening both access to capital and the foundations for business growth will be necessary to move away from the low-productivity structure centered on self-employment and to restore a virtuous cycle in which sustainable business dynamics and quality jobs can continue to expand across the service sector.

[Box 1] Criteria for Classifying High- and Low-Value-Added Services

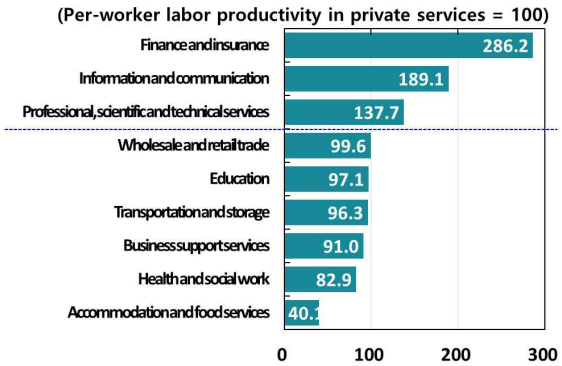
□ Based on the average labor productivity per worker in the overall private service sector during 2020–2024, sectors were classified as high value-added services when their productivity was above the average and as low value-added services when it was below the average.

o According to the Korean Standard Industrial Classification (KSIC), high value-added services include finance and insurance, information and communication, and professional, scientific and technical services.

o Low value-added services consist of wholesale and retail trade; accommodation and food services; transportation and storage; health and social work activities; education services; arts, sports and recreation-related services; and other personal services.

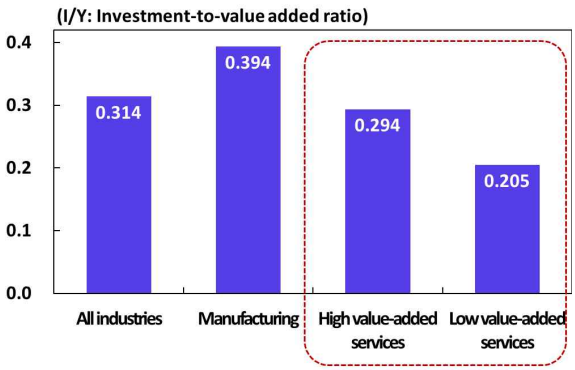
□ High value-added service sectors tend to be relatively capital- and technology-intensive, whereas low value-added service sectors often exhibit strong labor-intensive characteristics.

Labor Productivity per Worker by Service Sector



Note: 1) 2020-2024 averages
Sources: National accounts, Economically Active Population Survey

Investment Rate by Industry



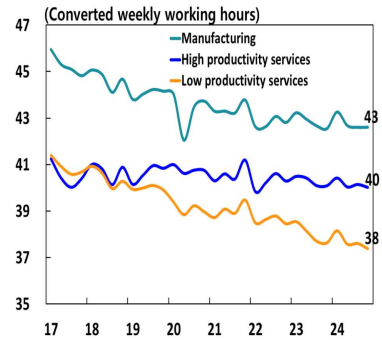
Note: 1) 2000-2022 averages
Source: National accounts

[Box 2] Trends in Average Hours Worked by Industry

□ With the establishment of the 52-hour workweek, overtime has declined and the share of part-time employment has increased, resulting in a continued decline in average working hours in the service sector.[26)]

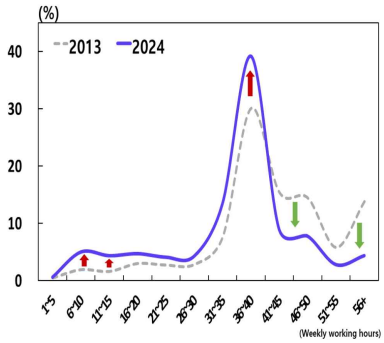
o In particular, working hours in high value-added service sectors have declined only marginally, while those in low value-added sectors have shown a pronounced decrease since the pandemic.

Trends in Average Hours Worked by Industry



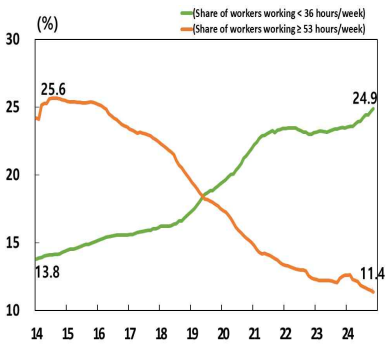
Note: 1) Averages for 2000-2022
Sources: Statistics Korea, authors' calculation

Distribution of Working Hours in the Service Sector



Note: 1) Based wage and salary workers
2) Exclding public administration and defense
Sources: Economically Active Population Survey

Employment Share by Working Hours in the Service Sector



Note: 1) Excluding public administration and defense
2) Based on the 12-month moving average
Sources: Economically Active Population Survey

□ Although total employment and total working hours have generally moved in tandem in the past, the continued structural decline in average working hours indicates that increases in employment do not necessarily translate into greater total labor input.

o In the manufacturing sector, employment has recovered to pre-pandemic levels, but total working hours remain below those levels because of a decline in average hours worked.

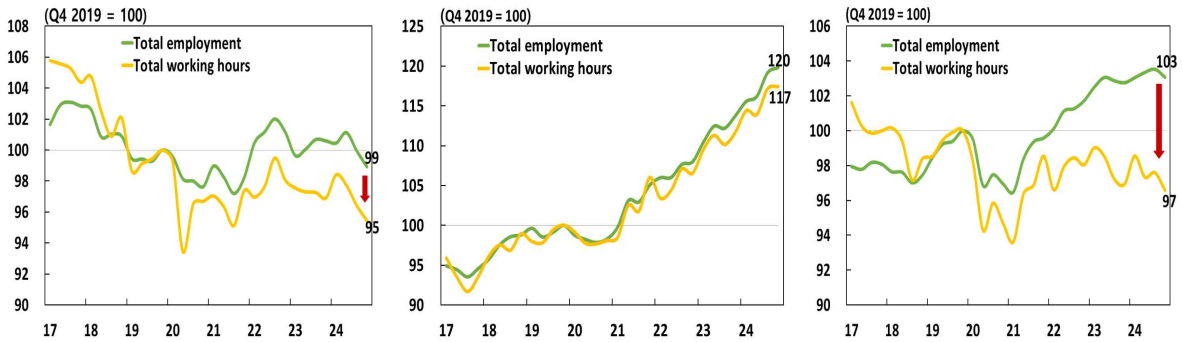
o In the service sector, average hours worked in high value-added services have remained relatively stable, resulting in an increase in total working hours in line with

26) The decline in average working hours is attributed to a combination of factors: (1)policy effects such as reduced overtime following the implementation of the 52-hour workweek, (2)an increase in the share of part-time employment, and (3)the structural decrease in the number of self-employed individuals engaged in long working hours.

employment growth. In contrast, in low value-added services, total working hours remain below pre-pandemic levels despite post-pandemic employment growth.

Trends in Labor Input: Total Employment vs. Total Hours Worked

<Manufacturing> <High Value-Added Services> <Low Value-Added Services>



Sources: Economically Active Population Survey, Labor Force Survey at Establishments

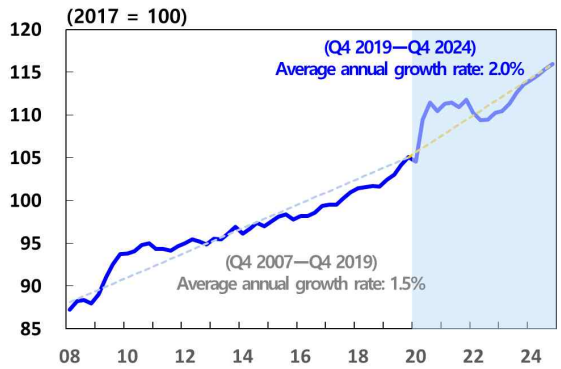
[Box 3] Drivers of Post-Pandemic Productivity Growth in the U.S.: Business Dynamics in High-Tech Services

□ Since the pandemic, labor productivity in the U.S. business sector* has increased at an average annual rate of 2.0%, surpassing the 1.5% average recorded during the previous economic expansion (Q4 2007–Q4 2019).

* This sector covers all areas of the U.S. economy except agriculture, forestry, fishing, and government.

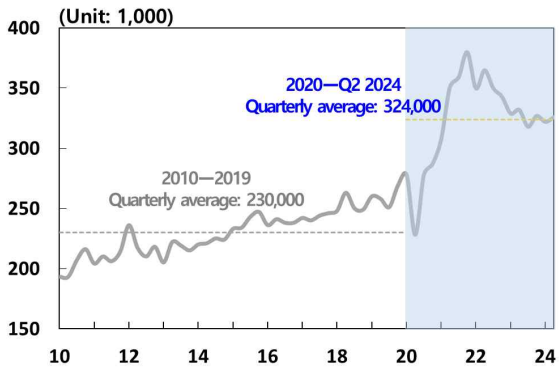
o The U.S. Federal Reserve (FRB, 2025) points to the shift toward revitalized business dynamics, spurred by the pandemic, as a key factor behind this productivity improvement.

Trends in U.S. Labor Productivity



Note: 1) Labor productivity per hour worked in the business sector
Sources: Federal Reserve Economic Data (FRED)

Trends in New Business Startups

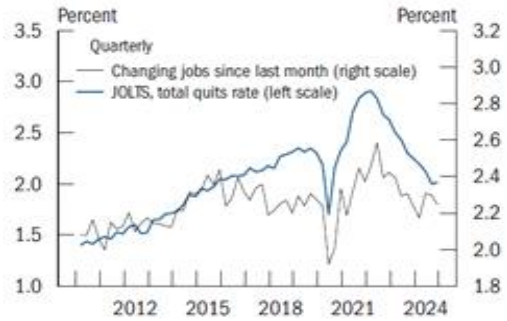


Sources: Bureau of Labor Statistics(BLS) Business Employment Dynamics

□ In the early phase of the pandemic, productivity rose mainly from the temporary effect of worker reallocation, but since 2021 this effect has gradually diminished. Meanwhile, the entry rate of new businesses has remained persistently high, providing structural support for sustained productivity growth.

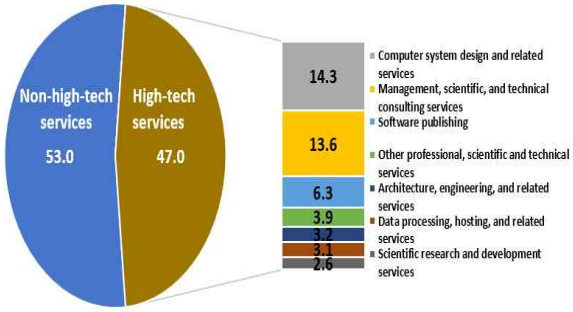
o In particular, high-tech service sectors—such as computer systems design, software publishing, data processing and hosting, and scientific research and development—have experienced a pronounced rise in new business entries.

Trends in Worker Reallocation



Sources: FRB(2025)

Industry Share of New Business Entry Growth



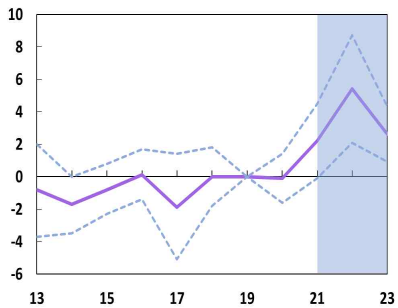
Note: The figures represent the increase in the number of new business entries in 2023 compared to 2019.
Sources: Decker&Haltiwanger(2024)

☐ These changes have also had a positive effect on the labor market, contributing to job creation and the expansion of total employment.[27)]

o Meanwhile, the rise in new corporations in high-tech service sectors has been driven not only by entrepreneurial startups, but even more prominently by greenfield investment, referring to new legal entities established by existing firms.

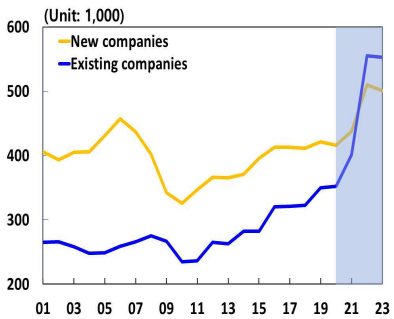
o This implies that existing firms have expanded production capacity and strengthened their market position through strategic investment in high-tech sectors.

Estimated Net Entry in High-Tech Service Sectors



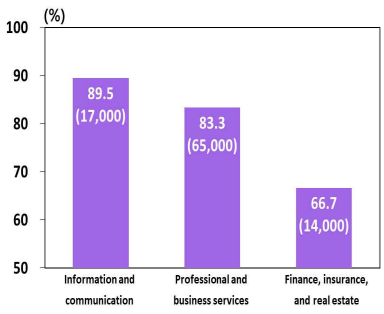
Note: Regression analysis shows that the net entry of high-tech service industries has been significantly higher each year compared with other industries.
Sources: Decker&Haltiwanger (2024)

Trends in Business Establishment by New and Existing Companies



Sources: Decker&Haltiwanger (2024)

Share of New Business Establishment Attributable to Existing Companies Compared to the 2013–19 Avg



Note: 1) 2020–2023 averages
2) Numbers in parentheses indicate the number of businesses.
Sources: Decker&Haltiwanger (2024)

27) Between 2019 and 2023, high-tech industries are estimated to have created between 1.0 and 2.4 million jobs (Decker&Haltiwanger, 2024).

[Box 4] Promising Services and Manufacturing Linkages: Gaming, Content, Healthcare

① Gaming Industry

□ **[Overview]** Korea's gaming industry has steadily expanded since the early 2000s, accounting for a major share of digital service exports.[28] However, growth momentum has moderated since 2022[29], and recently, the rising competitiveness and aggressive investment strategies of Chinese game developers have heightened competition not only in exports to China but also in the domestic market. In response to these changes, there is an increasing need to reassess the industry's competitive fundamentals and to diversify its growth trajectories.

□ **[Manufacturing Linkages]** Beyond its role within the content industry, the gaming sector has the potential to create new inter-industry linkages through convergence with manufacturing. Korea has already demonstrated strong technological capabilities in interactive technologies, real-time rendering, and 3D engines—capabilities accumulated through the game development process. These strengths are viewed as opportunities for further advancement through convergence with advanced manufacturing processes such as smart manufacturing and digital twins. In particular, game-based UI/UX and immersive content technologies can be applied to a wide range of manufacturing fields, including industrial simulation and virtual environment design. The development of physical products leveraging game intellectual property(IP)—such as toys, apparel, and electronic devices—also serves as a notable example of convergence between content and manufacturing.

□ **[Policy Directions]** Moreover, to support the sustainable growth of the gaming industry, it is essential to both transform public perceptions of games and establish an appropriate institutional framework. The positive functions of games—such as their scalability for educational and industrial use and their significant cultural value—should be actively fostered through policy, while potential negative effects must be proactively managed. In Korea, however, concerns have been raised that existing regulations, including the preliminary re-

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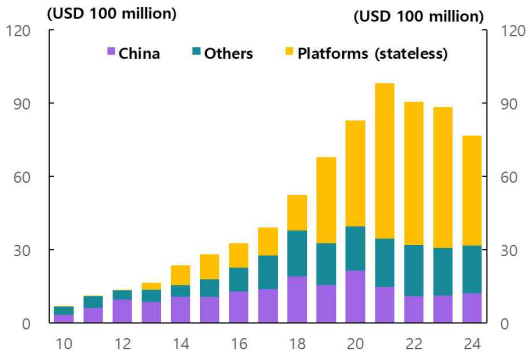
28) The gaming industry is recognized as Korea's leading service export sector, accounting for 61% of content exports in 2024 and 85% of computer and mobile software exports. As of 2023, Korea captured a 7.8% share of the global gaming market, ranking fourth after the U.S.(22.8%), China(22.4%), and Japan(9.6%)(*2023 Korea Game White Paper*). In the early 2010s, Korea's PC games were exported primarily to China; however, since the rapid expansion of the mobile platform market after 2014, Korean game exports have increasingly shifted toward mobile titles.

29) One major factor is that Korea's leading game developers remain heavily concentrated in a single genre—role-playing games(RPGs)—with revenue models that are not sufficiently aligned with evolving global consumer demand. In particular, while key markets such as North America and Europe are showing rising demand for games with simpler controls, shorter play times, and more diverse content, the Korean gaming industry has been slow to adapt to these shifts in a timely manner.

view system, export/import procedures, and platform integration policies, have not sufficiently adapted to the evolving market environment. In particular, certain types of content face institutional barriers to providing real-time updates or operating on global platforms, creating uncertainty in the process of entering overseas markets. Therefore, it is necessary to undertake a comprehensive overhaul of the regulatory framework to ensure parity across content industries and to transition toward a more flexible review system grounded in private-sector expertise.

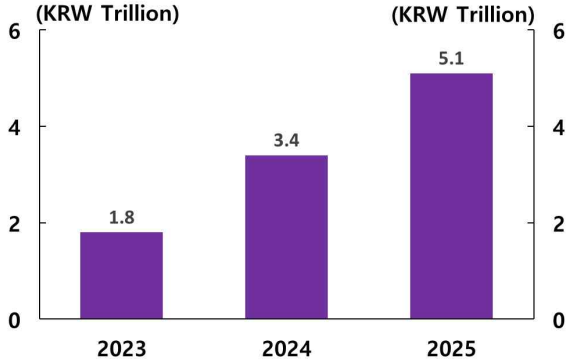
□

Game Exports by Region



Sources: Bank of Korea

Revenue Loss Estimate: Disease Classification of Gaming



Note: In 2019, the World Health Organization (WHO) officially classified "gaming disorder (6C51)" as a disease, alongside "gambling addiction (6C50)."
Sources: Korea Creative Content Agency (KOCCA)

② Cultural and Creative Industries

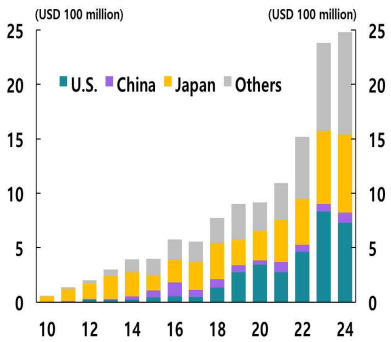
□ **[Overview]** Korea's cultural content industries—including K-pop, dramas, films, and webtoons—have risen to prominence in global markets, effectively overcoming the structural constraint of a limited domestic market. The growth of global platforms such as YouTube and Netflix, together with the proliferation of social media, has provided a foundation for Korean content to transcend borders and spread rapidly worldwide. As a result, K-content has evolved beyond simple cultural consumer goods, emerging as a key driver in enhancing Korea's national image and creating spillover effects across other industries.

□ **[Manufacturing Linkages]** K-culture is expanding beyond music and video content, emerging as an export base for a wide range of manufacturing industries such as tourism, beauty, food, and household appliances. Within the broader content industry, value creation through convergence with manufacturing is already well advanced. The K-pop industry, built on a vertically integrated model centered on agencies holding intellectual property(IP), has developed into a multifaceted export structure that combines service exports of performances and digital content with the consumption of physical goods—such

as light sticks, photo cards, and apparel—driven by global fandoms. This structure functions as an intermediary link between content and a wide variety of consumer products. Likewise, webtoon IPs are actively expanding not only into video and gaming formats but also into physical products, ranging from merchandise sold via official global platform stores to licensed collaborations with manufacturers. Such linkages with manufacturing contribute to diversifying revenue streams and enhancing the value-added component of content exports.

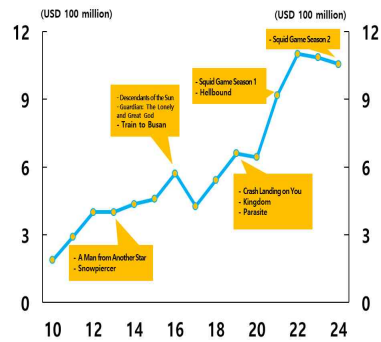
□ **[Policy Directions]** Despite these achievements, the video content sector continues to face structural challenges, such as the growing dominance of global OTT platforms, the concentration of resources among large production companies, and heavy reliance on specific genres. The webtoon industry likewise grapples with persistent issues, including imbalanced revenue distribution and inadequate protection for small and medium-sized creators in a platform-centric ecosystem. For the sustainable growth of the content industry, it is essential to establish institutional frameworks that safeguard creators' rights and ensure fair revenue sharing, while simultaneously fostering competition to curb platform monopolies. In addition, to support the global expansion of small and medium-sized creators, infrastructure for substantive assistance must be strengthened, including financial support, legal consulting, and partnerships with local distribution networks.

Regional K-pop Exports



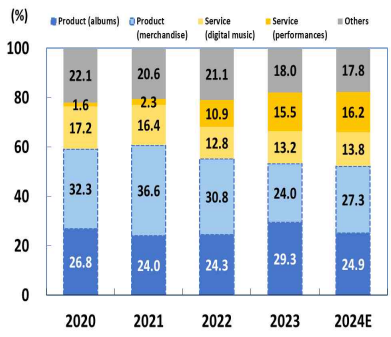
Note: Items include multimedia (digital music) copyright & production, and performances.
Sources: Bank of Korea

Broadcasting and Video Content Exports



Note: Based on exports reported by independent broadcasting and video production companies
Sources: KOCCA Survey Division

K-pop Sales Trends and Composition

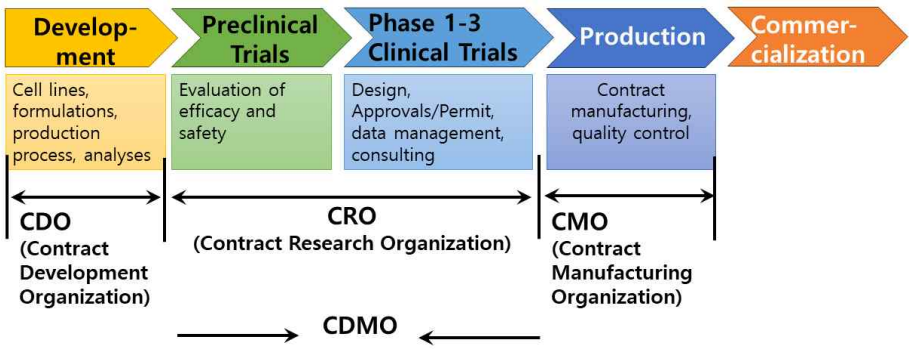


Note: Sales figures represent the combined total of the four major entertainment agencies: HYBE, SM, JYP Entertainment, and YG Entertainment.
Sources: Individual reports from HYBE, SM, JYP Entertainment, and YG Entertainment; NH Investment & Securities Research Headquarters

③ Healthcare Industry

□ **[Overview]** Korea's healthcare industry is expanding rapidly, driven by growth in biopharmaceuticals, digital healthcare, and medical devices. Leveraging its technological capabilities and innovative capacity, the industry is steadily strengthening its global competitiveness. In the biopharmaceutical sector, it is moving beyond the traditional contract manufacturing organization(CMO) model toward the contract development and manufacturing organization(CDMO) model, which integrates development(contract development organization, CDO) with production. The industry is also building a portfolio of platform technologies applicable to a broad spectrum of diseases, including antibody-drug conjugates(ADCs), bispecific antibodies, and subcutaneous(SC) injection formulations. In the field of digital healthcare, new forms of medical services—such as AI-based diagnostics, disease prediction, and telemedicine—are also expanding, supported by health data collected through smartphones and wearable devices.

Bio Industry: Drug Development Phases and Outsourcing Models



Sources: Commercializations Promotion Agency for R&D Outcomes(COMPA)

□ **[Manufacturing Linkages]** This trend highlights the evolution of healthcare beyond conventional medical services into a high value-added industry through convergence with manufacturing. Biopharmaceuticals exemplify the integration of precision manufacturing processes with advanced R&D, where manufacturing-based value added is increasingly expanding in the form of knowledge-intensive services. Digital healthcare is likewise evolving into a convergent industrial structure that encompasses hardware production together with software and data services. In this context, healthcare is emerging as an export-capable industry—through channels such as intellectual property revenues and personalized diagnostic and therapeutic services—with strong potential to develop into a leading export-oriented sector in the future.

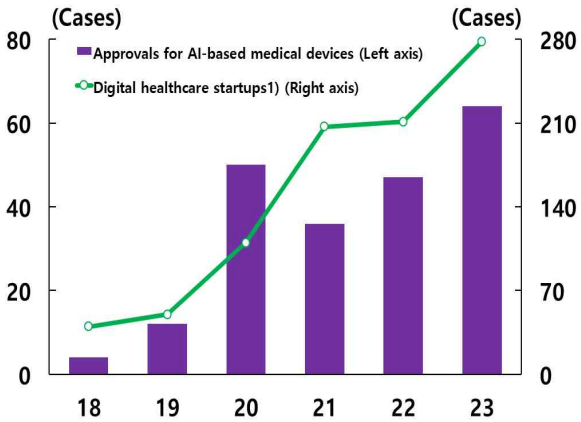
□ **[Policy Directions]** Nevertheless, amid intensifying global competition and rapidly changing

market conditions, strategic policy responses are essential to secure the sustained growth and export expansion of Korea's healthcare industry. In biopharmaceuticals—where high clinical costs, complex approval procedures, and insurance coverage challenges pose significant entry barriers—tailored policy support is required to address these constraints. For digital healthcare, key priorities include revising legal frameworks for data utilization, establishing systems for collaboration with medical institutions, and streamlining approval processes. Moreover, it is critical to respond proactively to shifts in the global regulatory environment—such as the U.S. BIOSECURE Act—and to advance strategies for supply chain stabilization, including the establishment of overseas manufacturing bases.

Major Bio Platform Technologies in Korea

Platform Technologies	Main Content
Subcutaneous injection	A method of injecting medication into the subcutaneous fat layer. This approach offers several advantages, including greater convenience in drug administration, enhanced drug efficacy, and reduced side effects.
Antibody-drug conjugate (ADC)	A therapeutic modality that combines a specific antibody with a cytotoxic drug. The antibody selectively targets cells, allowing the drug to act precisely and thereby minimizing side effects.
Bispecific antibody	A therapeutic agent that uses an antibody capable of simultaneously recognizing two different antigens. It enhances anti-cancer immune responses and improves antibody transport rates to the brain.

Digital Healthcare Startups and AI Medical Device Approvals: Trends



Note: 1) Based on the number of investment reviews conducted by DHP, Korea's largest digital healthcare-focused investment firm
Sources: DHP, AIRIS2024, Ministry of Food and Drug Safety

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