# 3. Growth Potential and Structural Challenges in the Philippines: Role of Manufacturing and Services<sup>1</sup>

## Prepared by Andrew Tsang

The updated input-output (IO) analysis examines the Philippines' growth potential and structural challenges, emphasizing the dominance and resilience of high-value services such as IT-BPM and finance, alongside a persistently shallow and import-dependent manufacturing base. The findings underscore the need for a calibrated policy strategy that upgrades modern services, deepens manufacturing through "servicification" and infrastructure development, invests in human capital, and manages AI-related disruptions to sustain inclusive growth and long-term productivity gains.

#### Introduction

- 1. Structural weaknesses in manufacturing and emerging technological disruptions could weigh on the Philippines' long-term growth potential. The economy has shown remarkable resilience in recent years, sustaining solid growth despite a volatile global environment. The post-pandemic recovery has been driven largely by services—especially tourism, information technology and business process management (IT-BPM) and finance—but the country's shallow manufacturing base continues to constrain its ability to capture opportunities from global supply-chain reconfiguration. At the same time, rapid advances in artificial intelligence (AI) are transforming services, threatening niches in low-value business process outsourcing (BPO) niches and raising the imperative to move up the value chain. This Selected Issue reassesses the Philippines' growth potential and structural challenges using an updated input—output (IO) analysis and traces longer trends since 2000 to anchor policy recommendations.
- 2. The current study applies an IO multiplier framework to examine structural dynamics and sectoral interlinkages in the Philippine economy. Specifically, the analysis utilizes the Asian Development Bank's (ADB) Philippine IO tables for 2000 and 2007–2022 to compute standard multipliers—output, value-added, and import—as well as backward and forward linkage indicators derived from the Leontief inverse matrix. The computation procedure follows Ji (2023), and the estimated multipliers and linkage indicators are presented in Table A3.1.

Table A3.1. Multiplier and Linkage Indicators

	Indicators	Description
Multipliers	Simple output multiplier	Measures direct and indirect effects of one unit value of final demand from one industry on total output. The output multiplier for sector j is the sum of column j in the Leontief inverse matrix.
	Value-added multiplier	Measures total value-added generated in the economy (excluding intermediate inputs) due to a unit value change of final demand for one sector. It is calculated by the vector of value-added coefficient times the Leontief inverse matrix.
	Import multiplier	Measures the amount of imports required to meet one unit change in the final demand of each sector. It is calculated by the share of imports times the Leontief inverse matrix.
Intersectoral linkages	Backward linkage	Shows the demand amount from other industries, captured by the respective column coefficients of the Leontief inverse matrix. For easier comparison, the coefficients are divided by the mean across industries, so a number above 1 represents above-average backward linkage.
	Forward linkage	Shows how much an industry output is demanded by other industries, captured by respective row coefficients of the Leontief inverse matrix. For easier comparison, the coefficients are divided by the mean across industries, so a number above 1 represents above-average forward linkage.

Source: Ji (2023).

# **Updated Input-Output Results**

- 3. The updated IO analysis confirms that the higher value-added services sector remains the main growth driver after the COVID pandemic. The results are consistent with the findings of Ji (2023) on the pre-pandemic period.
- The IO analysis, based on the latest Philippine IO table in 2022, shows that tourism-related services (particularly hotels and restaurants), IT-BPM (other business activities) and some manufacturing industries (food processing and chemicals) generate strong output spillovers (Figure A3.1), suggesting they are growth drivers in the post-pandemic period. However, the output multipliers for major manufacturing segments, and electrical and optical equipment, were below average.
- Knowledge-intensive services, such as IT-BPM and finance, deliver higher domestic valueadded (Figure A3.2) and lower import leakages (Figure A3.3), reinforcing their sustainable growth potential. In contrast, manufacturing and tourism exhibit lower value-added multipliers and higher import multipliers.
- Backward linkages are strongest in food processing, hotels and restaurants, and chemicals, while forward linkages are notable for chemicals, finance, IT-BPM, and food and beverages, aligning with their roles as economy-wide input suppliers (Figure A3.4).

Figure A3.1. Output Multiplier by Industry, 2022

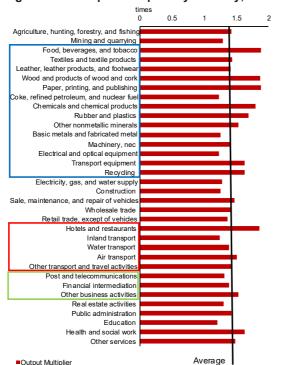
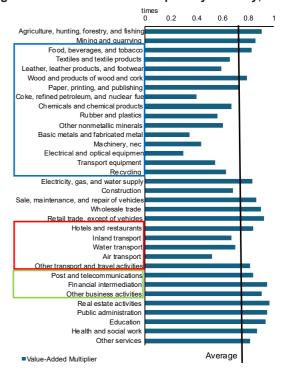


Figure A3.2. Value-added Multiplier by Industry, 2022



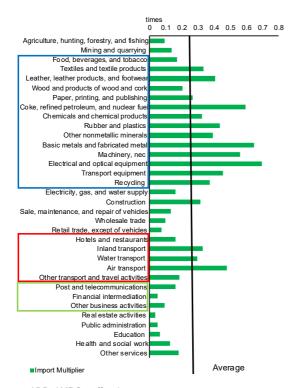
Source: ADB: AMRO staff estimates

Note: Manufacturing industries are highlighted in the blue frame, tourism-

Source: ADB: AMRO staff estimates

Note: Manufacturing industries are highlighted in the blue frame, tourismrelated industries in the red frame, and IT-BPM and finance are highlighted related industries in the red frame, and IT-BPM and finance are highlighted in the green frame

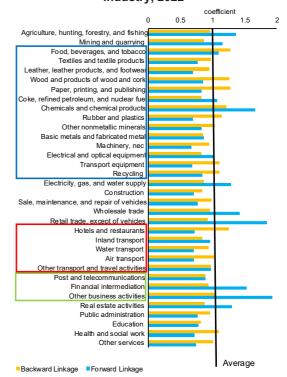
Figure A3.3. Import Multiplier by Industry, 2022



Source: ADB: AMRO staff estimates

Note: Manufacturing industries are highlighted in the blue frame, tourismrelated industries in the red frame, and IT-BPM and finance are highlighted related industries in the red frame, and IT-BPM and finance are highlighted in the green frame.

Figure A3.4. Forward and Backward Linkages by Industry, 2022



Source: ADB: AMRO staff estimates

Note: Manufacturing industries are highlighted in the blue frame, tourismin the green frame. The coefficients are divided by the mean across industries, so a number above 1 represents forward/backward linkage.

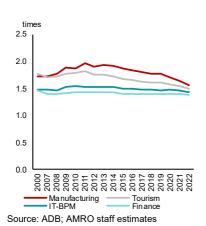
# 4. The long-term evolution of the Philippine input-output structure underscores both resilience in services and persistent structural weaknesses in manufacturing.

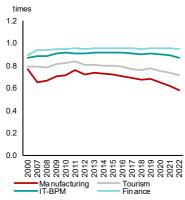
- Average output multipliers have remained broadly stable in IT-BPM, mainly BPO, and in finance since 2000. Meanwhile, manufacturing and tourism exhibit stronger output spillovers, but these have gradually weakened over the past two decades (Figure A3.5). The gradual decline in manufacturing's output multiplier may partly reflect a steady servicification of production, in which demand for manufacturing is increasingly transmitted through service inputs such as logistics, finance and BPO.
- In contrast, value-added multipliers have been consistently higher and stable in finance and IT-BPM, while being lower and gradually declining in manufacturing and tourism (Figure A3.6). The upward trend in value-added multipliers for modern services since 2010 reflects productivity gains from digitalization and rising human-capital intensity.
- Import multipliers are persistently high in manufacturing and tourism, having continuously increased since 2011 (Figure A3.7). These reflect sectors that are highly dependent on imported intermediates, particularly due to the country's shallow manufacturing base. By contrast, services sectors—including IT-BPM and finance—record progressively lower import multipliers, underscoring their role in improving the economy's self-sufficiency.

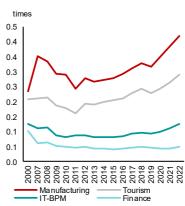
Figure A3.5. Output Multipliers of Selected Industries, 2000-2022

Figure A3.6. Value-added Multipliers of Selected Industries, 2000-2022

Figure A3.7. Import Multipliers of Selected Industries, 2000-2022





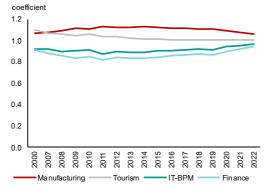


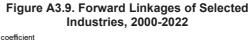
Source: ADB: AMRO staff estimates

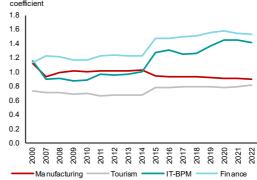
Source: ADB; AMRO staff estimates

• Structural linkages have also evolved. Manufacturing and tourism maintain above-average backward linkage indices, exceeding 1, indicating the high extent to which these sectors draw inputs from others (Figure A3.8). Backward linkages have strengthened in finance and IT-BPM, partly reflecting increased domestic sourcing. The forward linkages—how the analyzed sectors supply inputs to others—are strongest in finance and IT-BPM, and have increased since 2015 (Figure A3.9). These trends confirm that services, especially finance and IT-BPM, have become key enabling inputs to both industrial and household activities.

Figure A3.8. Backward Linkages of Selected Industries, 2000-2022







Source: ADB; AMRO staff estimates

Note: The coefficients are divided by the mean across industries, so a number above 1 represents above-average forward or backward linkage.

Source: ADB; AMRO staff estimates

Note: The coefficients are divided by the mean across industries, so a
number above 1 represents above-average forward or backward linkage.

#### Structural Insights

**5.** The Philippines' shallow manufacturing base remains an important structural constraint. While manufacturing's overall contribution to domestic income is modest, a few subsectors—particularly food processing and chemicals—retain strong output multipliers and solid backward linkages, indicating their significant potential to trigger domestic supply chain spillovers. Meanwhile, manufacturing's contribution to domestic value-added has remained weak for two decades—particularly in capital- and energy-intensive branches, such as rubber and plastics, basic metals, and machinery—continuously showing high import multipliers and weak local sourcing, limiting value-added generation. High logistics, electricity and compliance costs, as well as gaps in infrastructure readiness and policy coherence, continue to erode competitiveness and limit integration into global production networks. Moreover, the lack of a

strong manufacturing sector, which can employ large numbers of workers, makes it more difficult to create stable wage jobs for vulnerable groups, thereby exacerbating income inequality.

- **6.** Services have become the main driver of growth and employment in the Philippines. The sector accounts for roughly 60 percent of GDP and two-thirds of total expansion over the past decade. The IO analysis highlights IT-BPM, finance, education and public administration as key sources of value-added creation (high domestic income and low leakage), while tourism and information and communication technology (ICT) shape total output dynamics and employment through large economy-wide spillovers. This composition both explains the dominance of services in GDP growth and underscores the dual challenge ahead: preserving and upgrading modern services to achieve quality growth, while localizing tourism supply chains to raise value retention.
- The IT-BPM industry, as a global leader in voice-based and rule-based processes, risks rapid erosion of its status as the Philippines' comparative advantage as AI tools replace routine tasks (See Cucio and Hennig, 2025; Box A "IT-BPM: Challenges and Opportunities from Rapid Growth in Artificial Intelligence"). Nevertheless, the IO evidence regarding high value-added, low import content supports a concerted shift toward higher-value segments, namely knowledge-process outsourcing (KPO), global capability centers (GCCs) and digital trade services.
- <u>Tourism</u> remains an important driver of output and jobs, with strong backward linkages to transport, food products and chemicals. However, its value-added multipliers remain below the economy-wide average due to heavy import content. Strengthening local sourcing will be critical to raising tourism's contribution to GDP, particularly through upstream development in agriculture, food processing, energy and construction materials.
- <u>Financial intermediation</u> continues to stand out for its strong value-added creation and systemic forward linkages, providing critical inputs across sectors and amplifying productivity economy-wide. These results justify further deepening of financial intermediation and digital finance to diffuse productivity gains to firms and to crowd-in private capital for supply-chain and infrastructure upgrades. Thus, the sector's growing integration with digital platforms and fintech ecosystems also deepens its cross-sectoral influence, reinforcing the expansion of both services and manufacturing value chains.
- 7. The need for "servicification" is evidenced by strong and increasing linkages in the Philippines. As mentioned in the Philippine Development Plan (PDP) 2023-2028, servicification could deepen bidirectional links between the manufacturing and services sectors, retaining more domestic value-added. The IO linkage analysis supports the need for servicification: manufacturing draws heavily on transport, finance and business services, signalling strong backward linkages, while services, especially finance and trade, supply critical intermediate inputs, indicating vital forward linkages. The results are also confirmed by analysis using the OECD-WTO trade in value added (TiVA) data shown in Moreno (2024). The persistence of high import multipliers in core manufacturing underscores the incomplete nature of this transition. Strengthening domestic supply chains in food processing, chemicals, and tourism-linked industries, and leveraging modern services to raise productivity, remain critical for translating servicification into broad-based, inclusive industrial growth.

## **Policy Implications**

- 8. The latest IO evidence underscores a need to refine the Philippines' growth strategy in light of the dual challenges of a shallow manufacturing base and rapid AI development. The strategy should prioritize upgrading high value-added sectors such as IT-BPM, while also building manufacturing depth and advancing servicification. At the same time, establishing a performance evaluation framework with streamlined targets will be critical to monitor sectoral outcomes and assess the effectiveness of public spending. Furthermore, mobilizing both public and private investment—including through the Maharlika Investment Fund—will be essential to expand infrastructure and develop green industries.
- 9. To implement the growth strategy, policy could be anchored in three pillars:
- First, strengthen high-value services and manage Al disruption. Policies should support IT-BPM's transition to KPO and GCC activities through R&D and innovation incentives. Strengthening digital infrastructure<sup>2</sup> would enhance the digitalization and competitiveness of IT-BPM and other knowledge-based services.
- Second, rebuild manufacturing through servicification and infrastructure. Developing industrial clusters, logistics, and reliable power grids, including renewables, will be critical. Improved road connectivity and logistics infrastructure, for example, would support tourism, manufacturing, and agriculture by facilitating the movement of goods and people.
- Third, invest in human capital and institutional delivery. Sustaining services-led growth and credible industrial upgrading requires a future-ready workforce. The case for allocating around 4 percent of GDP to education is strong if paired with STEM and digital curricula, industry-linked technical training, and agile reskilling programs. Such efforts would allow BPO and ICT to transition decisively into KPO and GCC activities, while enabling manufacturing to absorb the digital, engineering, and managerial capabilities embedded in services.

## References

- Cucio, M., and Hennig, T. 2025. "Artificial intelligence and the Philippine labor market: Mapping occupational exposure and complementarity." IMF Working Paper No. 25/43.
- Ji, K. 2023 "Philippines' Services Sector Developments and Intersectoral Linkages." AMRO Annual Consultation Report on the Philippines 2023.
- Moreno, N. I. S. 2024. "The Role of Services in Global Value Chains: Assessing the Servicification of Philippine Manufacturing Industries." Philippine Institute for Development Studies (PIDS) Discussion Paper No. 2024-39.

# **End Notes**

<sup>&</sup>lt;sup>1</sup> This Selected Issue was prepared by Andrew Tsang, Senior Economist.

<sup>&</sup>lt;sup>2</sup> Recent legislation efforts such as the National Roadmap on Digital Technology and Digital Skills and National Innovation Agenda and Strategy Document (NIASD) 2023-2034 are welcomed. Moreover, the legislative process should be expedited for the proposed Konektadong Punoy Bill and Satellite-Based Technologies for Internet Connectivity Act, which enhance digital infrastructure investment and connectivity.