## Online Annex 4. Investment by Economic Activity in Latin America: Closing the Data Gaps<sup>1</sup>

Understanding investment trends is essential for assessing an economy's long-term growth potential. This is especially important for Latin America's current juncture as its growth prospects hinge on raising investment and taking advantage of the green transition and nearshoring opportunities. Yet, timely and granular public data on investment by economic activity is largely unavailable. This Annex describes an effort to construct such data using available macroeconomic statistics for selected Latin American countries. National authorities should invest in producing more timely and comprehensive statistics on investment to enhance macroeconomic analysis and policy making.

Timely and consistent data on investment by economic activity is not publicly available for the countries in Latin America. While the national accounts ('supply and use' tables) have detailed data on investment products (e.g., buildings, machinery, and infrastructure) and their origin (domestic or imported), they do not specify the economic sectors where the investments are undertaken. Sector-specific *annual* investment data is available under the <a href="KLEMS">KLEMS</a> initiative but often with long lags—in some cases, reaching five years.

To generate *quarterly investment data by economic activity* for LA5 countries (Brazil, Chile, Colombia, Mexico, Peru), detailed data on investment products is combined with the sectoral investment data from the KLEMS to derive *annual investment matrices* which assign products to sectors and are binding for the quarterly estimates (e.g., tractors are assigned to agriculture, mining equipment to mining, and bridges mainly to public administration).<sup>2</sup> Then, using quarterly data on domestic production and imports by product groups, quarterly estimates of sectoral investment can be generated.<sup>3</sup> This exercise yields quarterly investment data for 10–13 sectors, depending on the country, from 2014 onwards. Both nominal and real series can be produced.

The estimates show that, since the end of the commodity price boom a decade ago, the decline in total investment as a share of GDP in LA5 countries (especially when excluding Mexico) was driven by falling investment in non-tradable sectors (Online Annex Figure 4.1). The share of tradeable sectors remained largely unchanged and even declined for mining (Online Annex Figure 4.2), suggesting limited progress in positioning the region to harness the growing global demand for critical green minerals. While investment recovered relatively strongly after the pandemic, it has weakened since 2023, except in Mexico, reflecting also weaker commodity prices (Online Annex Figure 4.3). In Brazil, Chile, and Peru, the pre-pandemic broad-based growth in private investment slowed significantly in recent quarters, along with notable changes in the composition of investment from tradables to (residential) construction in Brazil. In Colombia, public sector investment was a key driver of investment growth before and after the pandemic, but its contribution turned negative since mid-2023. Unlike other LA5 countries, Mexico's pre-pandemic investment growth was close to zero, but it surged since 2021 and remained exceptionally strong, driven by manufacturing (owing to nearshoring) and more recently also by the public sector to complete big infrastructure projects (e.g., new refineries and railway lines).

The newly constructed data on investment helps put more of a spotlight on the challenges facing the Latin American economies in boosting productive investment, including in sectors that stand to benefit from global transformations. In turn, enhancing national statistics to produce such timely and granular information, with dedicated resources and actual source data, would be an important addition to a policy-relevant information toolkit.

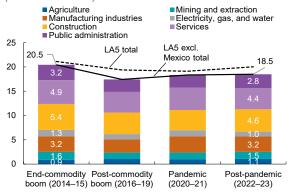
<sup>&</sup>lt;sup>1</sup> Prepared jointly with Lorena Corso and Bright Richard Kimuli under the supervision of Michael Stanger (all Statistics Department, IMF).

<sup>&</sup>lt;sup>2</sup> Products that are used by different sectors, such as computers and furniture, are assigned according to their total sectoral investment.

<sup>&</sup>lt;sup>3</sup> For products serving both investment and consumption purposes (e.g., pickup trucks), data is supplemented by country-specific or other additional information to delineate their use. Sectorial estimates are calibrated using multivariate temporal disaggregation with constraints) to align them with the total investment figures at the lowest available level of aggregation.

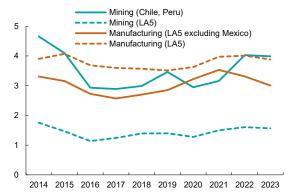
## Online Annex Figure 4.1. LA5 excluding Mexico: Gross Fixed Capital Formation by Economic Activity

(Percent of GDP)



Sources: National authorities; and IMF staff estimates. Note: Aggregates are purchasing-power-parity GDP-weighted averages. "Construction" activity includes residential construction which in original data is included in "services" (real estate) activity. For Colombia, Mexico, and Peru, "social community and personal services" activity is used as a proxy for "public administration." LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

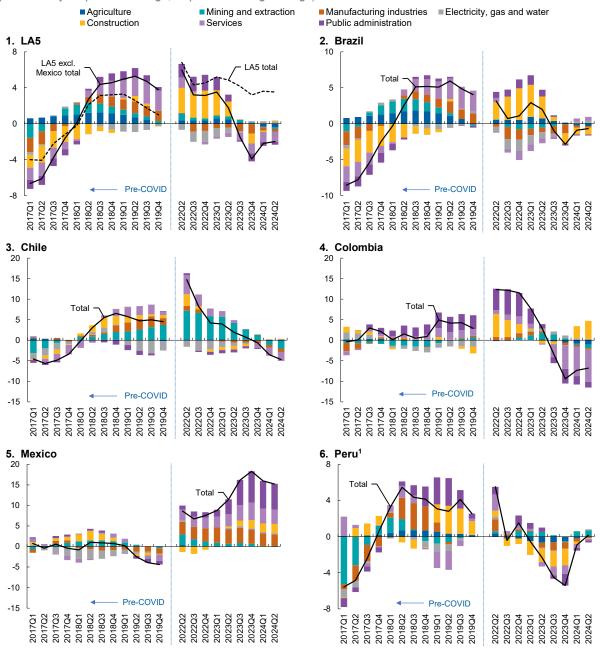
## Online Annex Figure 4.2. Gross Fixed Capital Formation in Mining and Manufacturing (Percent of GDP)



Sources: National authorities; and IMF staff estimates. Note: Aggregates are purchasing-power-parity GDP-weighted averages. LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

## Online Annex Figure 4.3. Contributions to Real Gross Fixed Capital Formation Growth by Economic Activity

(Year-over-year percent change; 4-quarter moving average)



Sources: National authorities; and IMF staff estimates.

Note: Data for COVID years (2020–21) are not shown in the charts. Aggregates are purchasing-power-parity GDP-weighted averages. "Construction" activity includes residential construction which in original data is included in "services" (real estate) activity. For Colombia, Mexico, and Peru, "social community and personal services" activity is used as a proxy for "public administration." LA5 = Latin America 5 (Brazil, Chile, Colombia, Mexico, Peru).

1 Data is based on the national accounts compiled by INEI which is different from the data produced by the BCRP.