Emerging Insight

Elevating Mexico's productivity: Unlocking potential via nearshoring

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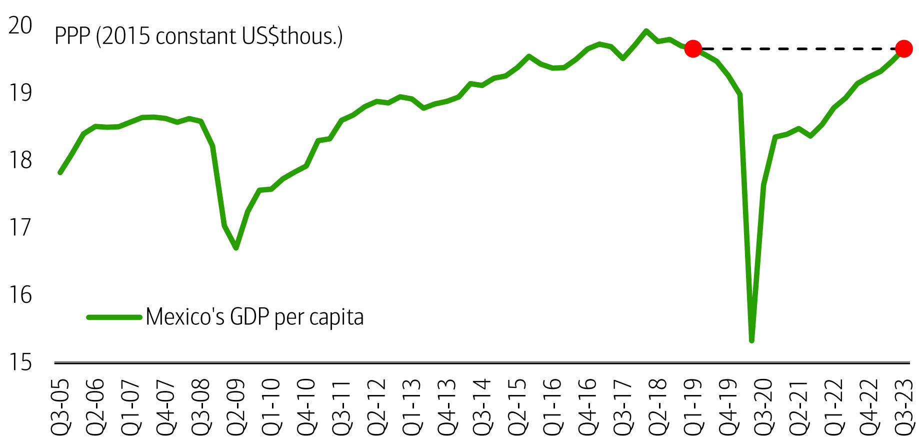
Key takeaways

- Mexico's growth has been modest in recent years: GDP per capita is at the same level as in 2019 and it is only 2% above 2012.
- The main reason seems to be low productivity: Accumulated growth in total factor productivity in the last 10 year is -2.0%.
- But Mexico's investment is on the rise, in part due to nearshoring, which could boost productivity in the following years.

By Carlos Capistran

Chart of the day: Mexico's GDP per capita remains at 2019 levels
Mexico's GDP per capita remains at levels like 2016-2019



Source: BofA Global Research, OECD, Haver

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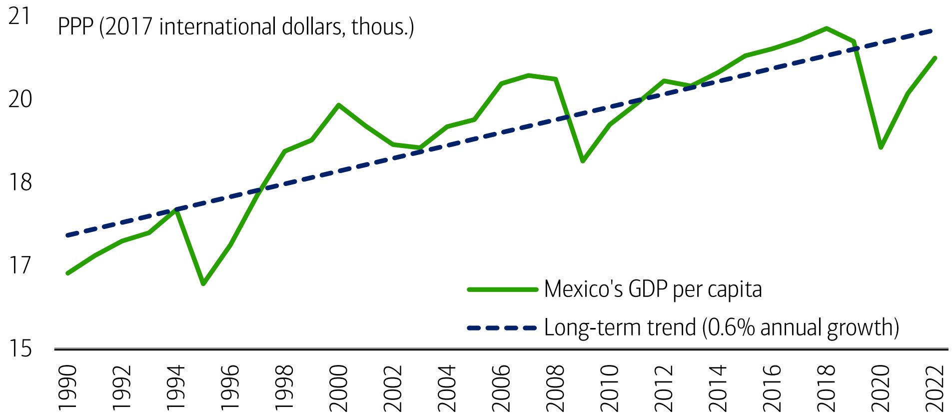
Unlocking Mexico's productivity

Mexico's growth has been modest in recent years. GDP per capita is at the same level as in 2019, and the accumulated growth in the last 10 years is only 2.1% (Chart of the day). The main reason why growth has been low seems to be low productivity, as accumulated growth in Total Factor Productivity (TFP) in the last 10 year is -2.0%. But the recent nearshoring opportunity could provide a boost to Mexico's productivity. The first step is happening with investment recently increasing to 25% of GDP. The next step is for nearshoring to help Mexico attract more Foreign Direct Investment (FDI). However, Mexico needs to do more to improve productivity: Invest more in human capital, energy, rule of law and institutions while increasing access to finance.

Mexico's GDP per capita growth has been modest

Mexico's growth has been modest in recent years. GDP per capita is at the same level as in 2019 (Chart of the day). GDP per capita's trend growth has been low for some time now. Trend growth since 1990 is at about 0.6% per year, and Mexico's GDP per capita is currently 2.4% below its long-term trend (Exhibit 1).

Exhibit 1: Evolution of Mexico's GDP per capita, PPP (2017 international dollars, thous.)
Growth has been modest, and Mexico's trend is almost flat



Source: BofA Global Research, World Bank, Haver

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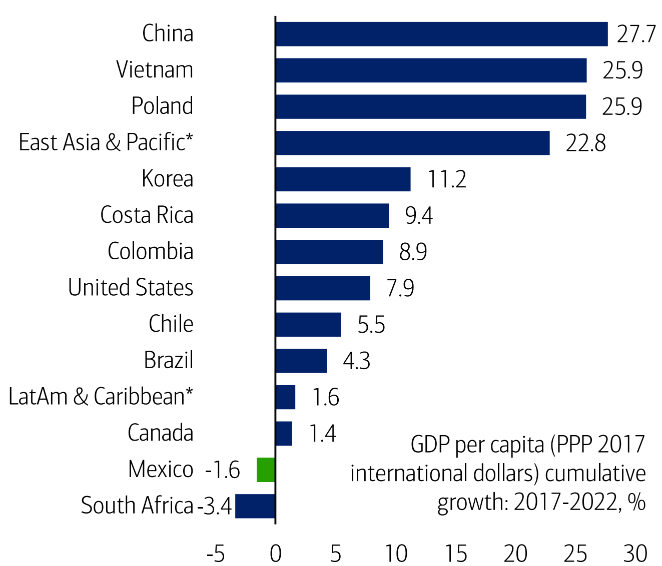
Mexico's GDP per capita growth compares poorly with other countries. While in the last 5 years per capita growth increased 28% in China, 25% in Poland, 11% in Korea and 8% in the US, in Mexico it fell 1.6% (Exhibit 2). And Mexico's problem is not recent, Mexico has many decades with poor performance (Exhibit 3). The cumulative growth of Mexico's per capita GDP is only 8.4%, well below the 30% accumulated growth in LatAm (including Mexico) (Exhibit 4).

Exhibit 2: Cumulative GDP per capita growth (PPP 2017 base, %yoy)
Some countries became richer in per capita terms; Mexico is poorer…



Source: BofA Global Research, World Bank, Haver. *Full list of countries available in Annex.

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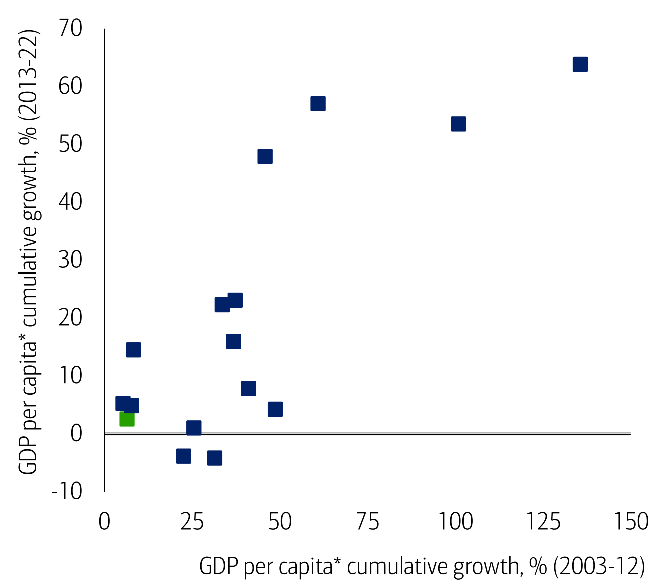
Exhibit 3: Cumulative growth of GDP per capita over the last 2 decades
… but this is not a recent phenomenon. Growth has been modest for decades



Source: BofA Global Research, World Bank, Haver. *GDP per capita, PPP 2017 international dollars

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Exhibit 4: Evolution of GDP per capita, a cross-country comparison (PPP 2017 base; %)
Mexico has had the lowest cumulative growth rate among the selected countries for the last 20 years

	GDP per capita, PPP (2017 international dollars)				Cumulative growth (last N years, %)		
	2002	2012	2017	2022	20y	10y	5y
China	4,024	10,371	14,244	18,188	351.9	75.4	27.7
Vietnam	4,082	6,950	9,051	11,397	179.2	64.0	25.9
Poland	16,727	25,259	29,958	37,707	125.4	49.3	25.9
East Asia & Pacific*	4,528	9,782	12,978	15,942	252.1	63.0	22.8
Korea	25,591	36,049	40,957	45,560	78.0	26.4	11.2
Costa Rica	12,986	17,810	20,168	22,071	70.0	23.9	9.4
Colombia	9,233	12,935	14,335	15,617	69.1	20.7	8.9
United States	50,529	55,797	59,908	64,623	27.9	15.8	7.9
Chile	16,054	23,468	24,547	25,886	61.2	10.3	5.5
Brazil	11,739	15,425	14,478	15,093	28.6	-2.2	4.3
LatAm & Caribbean*	12,086	15,329	15,488	15,740	30.2	2.7	1.6
Canada	42,416	46,127	48,317	48,975	15.5	6.2	1.4
Mexico	18,693	19,843	20,582	20,255	8.4	2.1	-1.6
South Africa	11,087	13,865	13,950	13,479	21.6	-2.8	-3.4

Source: BofA Global Research, World Bank, Haver. *Full list of countries available in Annex.

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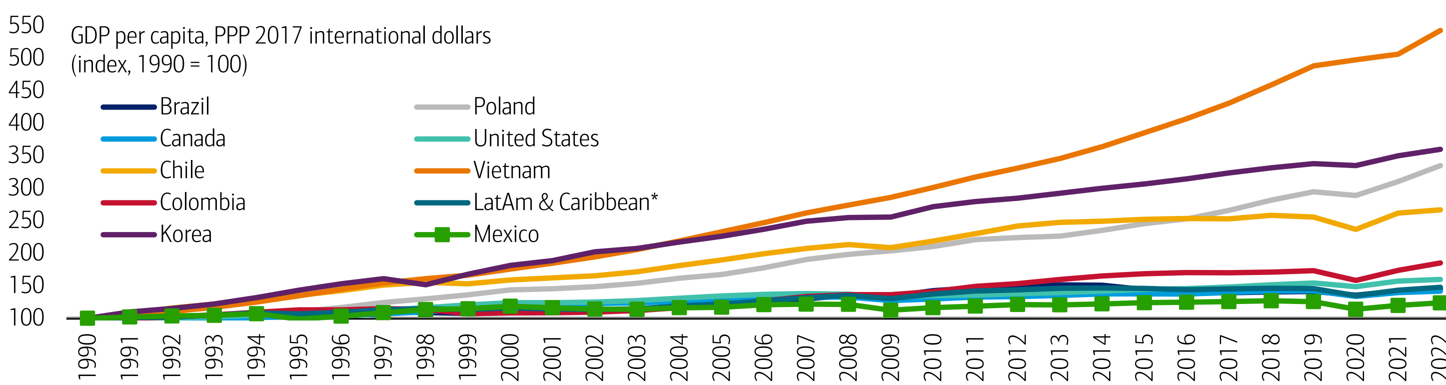
The modest performance of Mexico's GDP per capita is most easily seen in a chart with GDP per capita since 1990: The success of countries in Asia such as Korea and Vietnam is evident (despite their different levels of GDP per capita, their growth rates have been spectacular), while other countries in LatAm have also had some success, but not Mexico (Exhibit 5).

Exhibit 5: Evolution of GDP per capita over time (index, 1990 = 100)
Mexico has only achieved 24% of growth since 1990, below LatAm & the Caribbean which accumulates 48% growth since 1990



Source: BofA Global Research, World Bank, Haver. *Full list of countries available in Annex.

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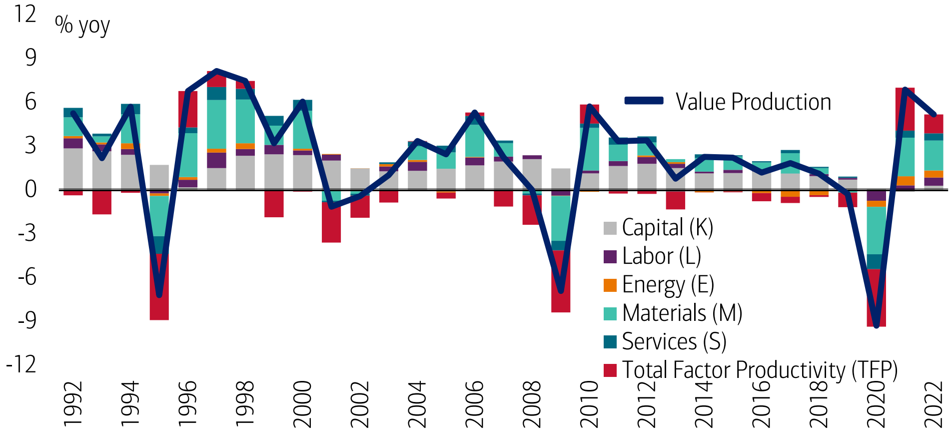
The main reason seems to be low productivity

The main reason why growth has been low seems to be low productivity. The Mexican statistical agency INEGI produces a breakdown of Mexico's growth in several components following the growth accounting literature (Exhibit 6). Total Factor Productivity (TFP) is a drag. The average per-year growth of TFP in the full sample (1991-2022) is -0.6%, and in the most recent 5 years in the sample is -0.2% (Exhibit 7).

Exhibit 6: Production value by components – KLEMS methodology (% yoy)
Total factor productivity has consistently dragged production value in Mexico



Source: BofA Global Research, INEGI

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Exhibit 7: Average annual growth of production value and its components
Total factor productivity has pulled down production and value generation since 1993 instead of supporting them

Avg. Annual growth (%)	Production Value (KLEMS + TFP)	Capital (K)	Labor (L)	Energy (E)	Materials (M)	Services (S)	Total Factor Prod. (TFP)
1993-2002	3.1	1.9	0.4	0.1	1.2	0.3	-0.9
2003-2012	2.0	1.6	0.3	0.0	0.7	0.2	-0.8
2013-2022	1.2	0.8	0.1	-0.1	0.6	0.1	-0.3
Full Sample (1991-2022)	2.3	1.5	0.3	0.0	0.8	0.2	-0.6
Last 5 years (2018-2022)	0.7	0.4	0.1	0.0	0.3	0.0	-0.2

Source: BofA Global Research, INEGI

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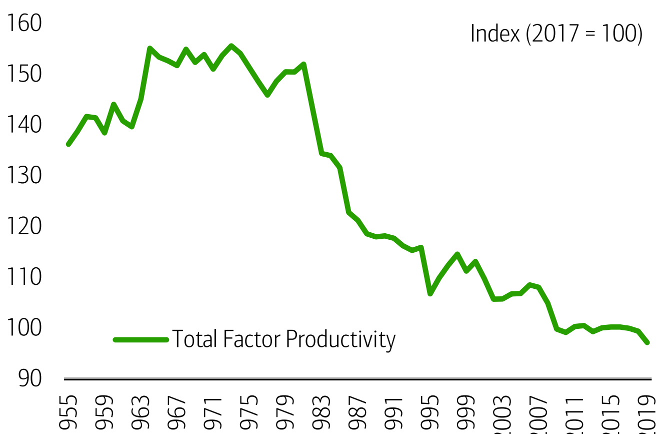
Looking at different sources of data paints the same picture: Mexico has a low productivity problem. Data from the Penn-World tables show that TFP fell drastically in the 80s and has not really recovered (Exhibit 8), and growth remains negative (Exhibit 9).

Exhibit 8: Total factor productivity in time (index, 2017 = 100)
Productivity in Mexico has fallen since'81, and is below '55 levels



Source: BofA Global Research, Penn World Tables

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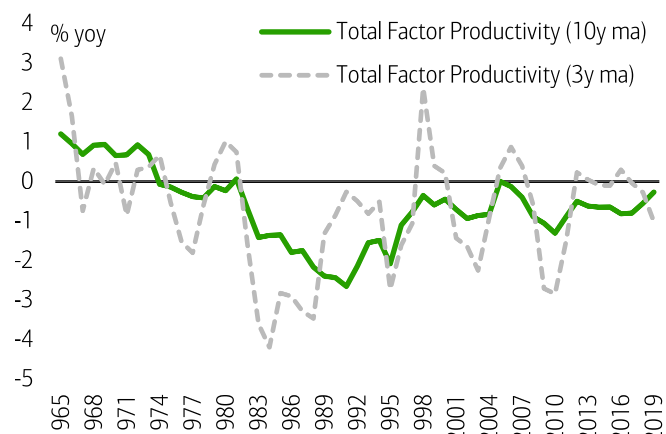
Exhibit 9: Total factor productivity growth, (% yoy)
TFP growth is more the exception than the rule in Mexico



Source: BofA Global Research, Penn World Tables

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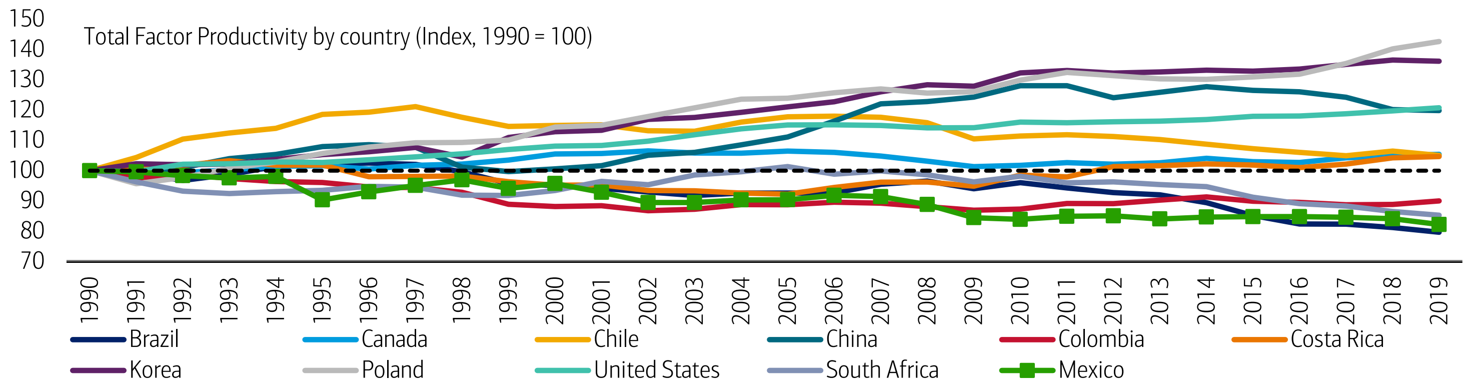
Mexico also underperforms when compared to other countries. TFP has grown less in Mexico than Poland, Korea, or the US, where productivity has increased significantly, but also than in countries such as Chile and Costa Rica. In the Penn World Tables, only Brazil fares worse among big countries in LatAm (Exhibit 10).

Exhibit 10: Total factor productivity by country (index 1990 = 100)
As of 1990, Mexico has lost 18% of its productivity and it is only above Brazil (-21%)



Source: BofA Global Research, Penn World Tables

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Slicing the data in different forms gives the same result: Mexico has a low productivity problem which is not new, but that has not really improved recently. Accumulated growth in Total Factor Productivity in the last 10 year is -2.0% (Exhibit 11) and average TFP growth since 2010 has been only -0.3% (Exhibit 12).

Exhibit 11: Cumulative growth of the Total Factor Productivity, %
Mexico's productivity has been low from a long time now

Total factor productivity (cumulative growth over the last N years, %)			
	20y (2000-2019)	10y (2010-2019)	5y (2015-2019)
Poland	24.7	9.8	8.9
Costa Rica	9.9	6.2	2.8
Korea	20.6	2.9	2.5
United States	11.7	4.1	2.4
Canada	-0.1	3.6	2.4
Colombia	2.1	3.1	0.1
Chile	-8.6	-5.7	-2.1
Mexico	-14.1	-2.0	-3.0
China	19.1	-6.4	-5.3
South Africa	-8.7	-13.1	-6.5
Brazil	-16.2	-17.0	-6.5

Source: BofA Global Research, Penn World Tables

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Exhibit 12: Total factor productivity average growth (% yoy)
By only scoring a decade of growth (1960-1969), Mexico is the worst performer in productivity terms

TPF avg. growth (%yoy)	Mexico	Brazil	Chile	Colombia	Costa Rica	China	Korea	Poland*	South Africa	Canada	United States
1960-1969	1.0	2.4	1.3	1.0	1.7	0.0	1.1	-	2.4	2.2	1.0
1970-1979	-0.1	2.1	-1.2	0.9	-0.3	-0.1	2.6	-	0.3	0.4	0.4
1980-1989	-2.4	-1.0	-0.5	-0.6	-2.0	0.0	2.0	-1.5	-0.8	-0.3	0.5
1990-1999	-0.5	-1.1	1.2	-1.1	-0.6	-0.4	1.3	0.0	-1.1	0.2	0.7
2000-2009	-1.0	-0.2	-0.3	-0.2	-0.1	2.2	1.4	1.4	0.5	-0.2	0.7
2010-2019	-0.3	-1.6	-0.5	0.4	1.0	-0.3	0.6	1.3	-1.2	0.4	0.6
Full Sample* (1960-2019)	-0.6	0.1	0.0	0.1	-0.1	0.2	1.5	0.5	0.0	0.5	0.6
Last 5 years (2015-2019)	-0.6	-2.3	-0.7	-0.3	0.5	-1.3	0.4	1.9	-2.1	0.3	0.7

Source: BofA Global Research, Penn World Tables. *Poland data is available since 1974, thus its full sample average is for the 1974-2019 period.

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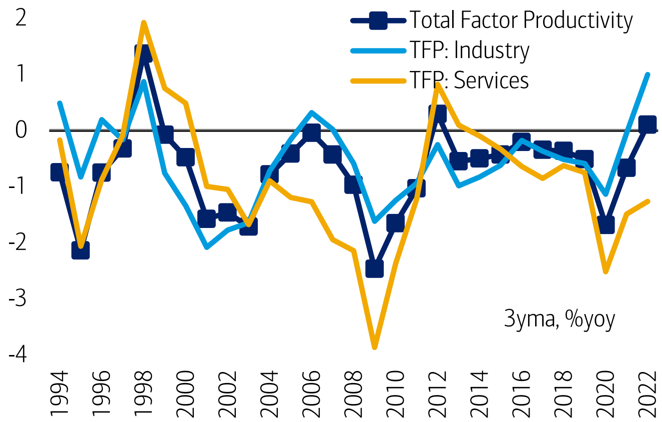
The main productivity drag seems to be services

The main drag for productivity seems to be services. The breakdown by INEGI shows productivity in services has a lower average growth than in industry (Exhibit 13). And labor productivity also shows a difference between industry and in services (Exhibit 14).

Exhibit 13: TFP breakdown by economic activities
Industry in Mexico seems more productive than the services' sector



Source: BofA Global Research, INEGI

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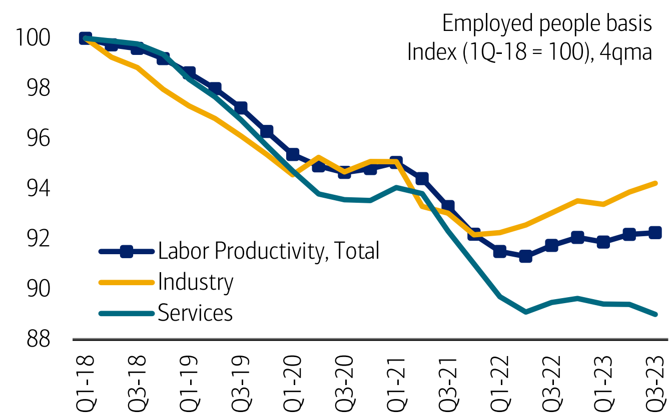
Exhibit 14: Labor productivity by economic activity
Industry has been a buffer, but services are almost 20% down since 2018



Source: BofA Global Research, INEGI

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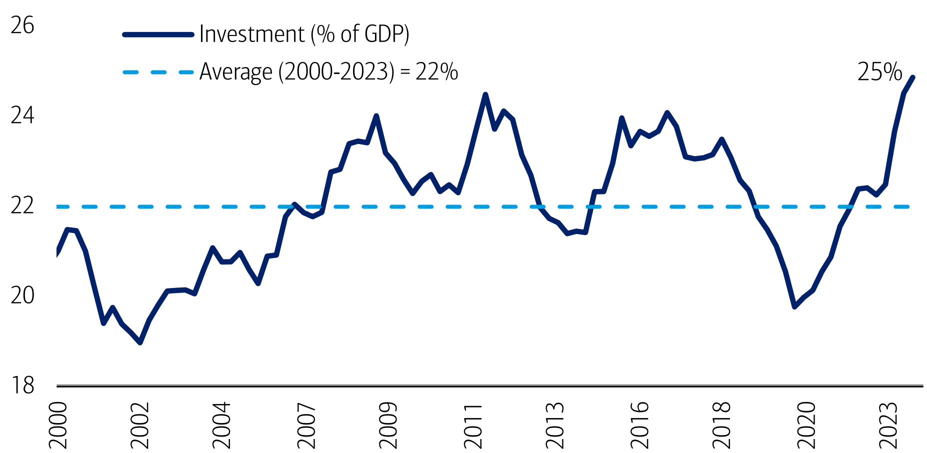
Nearshoring could be the key to unlock productivity

Mexico has a great opportunity with nearshoring. We consider it Mexico's lifetime opportunity. The relocation of production resulting from friend/nearshoring, which is happening, should lead to more investment, productivity, and eventually GDP (per capita) growth. In particular if it is truly relocation of production and not just rerouting (see our report: Friendshoring, or rerouting, that is the question). The first step is happening with investment recently increasing to 25% of GDP (Exhibit 15), as investment is booming. The next step is for nearshoring to help attract more Foreign Direct Investment.

However, Mexico needs to do more to take full advantage of nearshoring. Mexico needs to invest more in human capital, in energy, in infrastructure, in improving the rule of law and the quality of institutions while increasing access to finance. In Mexico there are many firms that are integrated to global supply chains, have access to finance, and employ people with high human capital. Those firms are more productive than firms which have not been able to benefit from the integration with North America.

Exhibit 15: Investment in Mexico (% of GDP)
Investment in Mexico is booming, and has recently reached 25% of GDP



Source: BofA Global Research, INEGI

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Annex: List of countries

East Asia and the Pacific: American Samoa, China, Fiji, Micronesia, Fed. Sts., Indonesia, Cambodia, Kiribati, Lao PDR, Marshall Islands, Myanmar, Mongolia, Malaysia, Nauru, Philippines, Papua New Guinea, Korea, North, Solomon Islands, Thailand, Timor-Leste, Tonga, Tuvalu, Vietnam, Vanuatu, Samoa.

Latin America (LatAm) and the Caribbean: Belize, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominica, Dominican Republic, Ecuador, Grenada, Guatemala, Guyana, Honduras, Haiti, Jamaica, St. Lucia, Mexico, Nicaragua, Peru, Paraguay, El Salvador, Suriname, St. Vincent and the Grenadines, and Venezuela, RB.

News and Views

Brazil: market expectations shifting towards a stronger BRL

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According to the Brazilian Central Bank's (BCB) weekly survey (Focus), exchange rate expectations moved to a more appreciated level for 2024 and 2026. The consensus for FX rate is now at R$4.92/US$1 (from R$4.95/US$1) for YE24 and R$5.05/US$1 (from R$5.06/US$1) for YE26, while YE25 and YE27 still stood at R$5.00/US$1 and R$5.10/US$1, respectively. Regarding inflation, IPCA forecast went slightly down to 3.86% (from 3.87%) for 2024, though staying unchanged for 2025, 2026 and 2027 (at 3.50%). GDP consensus dynamics were similar, with a slight increase in 2024 to 1.60% (from 1.59%) and the rest of the horizon (2025-2027) stable at 2.00%. No changes for Selic rate median expectations, which remain at 9.00% for YE24 and 8.50% for '25, '26 and '27.

- **To follow:** Consensus for IPCA is above our forecast of 3.7% for 2024-end, though remained similar for the rest of the horizon at 3.5%. Regarding interest rates, consensus see a lower Selic as our estimation is a terminal rate of 9.5% this year without later increases. GDP consensus is below our 2.2% growth expectation for 2024 and 2.5% in 2025. Regarding the FX, market participants foresee a weaker currency in 2024 (R$4.75/US$1), though similar in 2025 (R$5.00/US$1).

Brazil: 2023 Total Tax Collections declined -0.12% yoy, in real terms

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Total Tax Collections reached R$231.2bn in December (up from R$179.4bn in November), according to the Brazilian Internal Revenue Service (IRS). The result was above market expectations at R$227.3bn. With this, 2023 ended with R$2.3tn (from R$2.2tn in 2022), an increase of 4.5% - influenced by higher social security (9.80% yoy) and income tax revenues (5.10%yoy). However, in real terms, the variation was negative, registering -0.12% yoy.

- **To follow:** Despite deceleration in overall activity for 2024, the breakdown of GDP growth should be more favorable for tax collections this year.

Brazil: Mid-January IPCA increased 0.31% mom, below expectations

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IPCA-15 increased 0.31% mom in mid-January (from 0.45% mom in mid-December), according to the Brazilian Institute of Geography and Statistics (IBGE). The print surprised to the downside as our and market expectation were an increase of 0.47% mom. Annual inflation decelerated to 4.47% yoy (from 4.75% yoy), within the inflation target (3.00% + 1.5%). Compared to our forecast, main downward pressures came from Transportation (airfares) and Communication (streaming). However, the acceleration of food prices remains impacting the headline. Regarding underlying measures, core average accelerated at the margin (0.33% vs 0.28% in the previous month), but declined to 4.21% in 12 months (from 4.47%). Also, core industrials decelerated to 2.40% (vs 2.95%), while core services accelerated to 4.91% (vs 4.73%). Diffusion ex-food increased to 62.9% (vs 52.2%).

- **To follow:** Headline and underlying measures remain well-behaved and compatible with inflation within the target band. For 2024, we see IPCA decelerating to 3.7% by YE24, due to more benign underlying measure and lower administered prices (especially, electricity and gasoline).

-

Mexico: Unemployment rate at 2.79% sa in December

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Unemployment rate in December was in line with expectations at 2.61% (E. 2.61%, BofA 2.60%), down from 2.71% in November. Once adjusted for seasonality, unemployment was 2.79% sa, slightly down from 2.80% in November. Unemployment remained below 3.00% throughout the entirety of 2023 in sa terms. The participation rate decreased to 60.16% sa, from 60.42%, the informality rate fell to 53.79% sa, from 54.91%, while the underemployment decreased to 7.93% sa, from 8.17% in November. Moreover, urban unemployment fell to 3.30% from 3.36% in November.

- **To follow**: The labor market remains quite tight in Mexico, which will continue to put pressure on inflation, in particular services inflation.

Mexico: Trade balance posted a surplus of US$1.86bn sa in December

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The trade balance in December surprised to the upside with a US$4.24bn surplus (E. surplus US$1.84bn). Once adjusted for seasonality, the trade balance showed a surplus of US$1.86bn, up from US$0.07bn in November. Exports rose 1.3% mom sa (vs -1.7% in November) mostly due to non-oil, non-auto exports (-1.3% mom sa). Imports fell -2.3% mom sa (vs -1.1% in November) mostly driven by intermediate goods imports at -2.6% mom sa and consumption goods imports at -2.6% mom sa. In other terms, oil exports increased 8.8% mom sa and non-oil exports increased 0.9% mom sa, while oil imports decreased -15.7% mom sa and non-oil imports decreased -1.2% mom sa. This left the oil trade balance at US-$0.30bn and the non-oil trade balance at US$2.16bn

- **To follow**: The fall in imports of intermediate goods anticipate weaker exports in the following months. The large trade surplus continues to support MXN.

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