2023 Annual Global Economic Outlook

The plot thickens for 2023

Anticipating the global economic outlook for 2023 is like waiting for the next season in a popular mini-series to drop. We all want to know if 2023 will resolve two very pressing questions that have emerged since 2021: will inflation finally be brought under control and will the short-term cost of this effort be worth the pain?

We leave off at the end of 2022 with central banks attempting to curb a worldwide surge in prices. None of the 46 central banks that use inflation targets to set their interest rates will likely meet their targets by year end.¹ With inflation averaging over 14 percent across their respective economies, we are left to truly wonder what it will take to bring inflation back in line with their average target of 3.5 percent. Why this matters is these central banks control variables that influence nearly 80 percent of total global consumer spending.² If they set rates too low, then inflation runs too hot, reducing the purchasing power of households. If rates are too high, then demand from consumers and businesses falls, leading to higher unemployment rates.

Like any good story, it comes with key subplots that weave together the interplay between inflation, interest rates and the business cycle, with each of our economists providing insights on the key factors in their region influencing our outlook, as well as the global implications:

- Our first subplot involves **Europe**, where the cost-of-living crisis is coming harder and later than many other regions. The fall in growth due to **inflation** and higher interest rates should be offset in 2023 by a cushion from high savings and a still healthy labor market, but how this plays out remains to be seen.
- Next, in countries where central banks have moved earlier, such as **Canada**, attention is shifting from inflation to how consumers react to higher debt costs and the value of assets more sensitive to higher rates, such as **housing**. As housing starts to turn will we see a repeat of the U.S. subprime crisis or something milder? Given that the most recent upturn in housing was related more to the shift to more remote working, perhaps the ride down will be milder than wilder.
- As interest rates take an about-face, other areas of the market are also in flux. Valuations of technology firms in particular have taken a beating, and companies in the sector are scrambling to shore up cash flow. As they do, new questions arise about the future of technology and **digital commerce**. If what we see in **Latin America** is any indication, it's too early to count these innovative companies out.



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The plot thickens for 2023, cont.

- Beyond the fact that the world has never seen as many central banks raise their rates at the same time (92 out of 103 tracked), two aspects of this cycle have unnerved markets: how far will central banks go and when will they stop? The uncertainty, in particular, around the U.S. Federal Reserve's policies has helped in part to propel **the U.S. dollar** to multi-decade highs. In 2023, if the peak of the cycle nears, the dollar could reverse with important implications for businesses and economies around the world.
- Every good story brings in a hero—the knight in shining armor. With elevated inflation and interest rates leading to weaker consumer spending, especially in the more advanced economies, could China and Asia Pacific once again come in to move us back towards recovery and growth? So far, with China's growing economic slowdown, this appears unlikely.
 world to wonder just how far the downturn will extend into 2023 or beyond. Stay tuned.
- Lastly, if not Asia, where will growth potentially accelerate as the down cycle comes to an end? One possibility is Central Europe, Middle East and Africa (**CEMEA**). After the global population passed 8 billion in late 2022 and with dramatic **demographic shifts** occurring worldwide, CEMEA could account for the next billion if current trends continue.

While the next year's story has yet to be written, inflation most likely will be brought closer to target with the annual growth in global consumer prices expected to slow from 7.9 percent in 2022 to 5.4 percent in 2023.³ At the same time, real GDP growth is expected to halve from an estimated 3.0 percent this year to 1.5 percent next year⁴ (a level consistent with the global recession of 1991).

If the downturn occurs, it should be shallower than the two most recent global recessions, although also potentially longer. 2022 ends on a cliff-hanger, leaving the world to wonder just how far the downturn will extend into 2023 or beyond. Stay tuned.



Europe: Inflation shock

In 2022, consumers around the world experienced the shock of the worst inflation in decades. Several factors contributed to the situation, from the extraordinary policy accommodation during the darkest days of the global COVID-19 pandemic, to the lingering effects of lockdowns and pandemic-related disruptions on global supply chains and the labor market.

In the case of Europe, the Russian invasion of Ukraine in February created an additional shock, which further boosted energy prices—and in particular the cost of natural gas, on which Europe is particularly reliant. As of October, consumer prices were up 11 percent year-overyear in the United Kingdom, 10.4 percent in Germany, and 10.6 percent in the Eurozone.

As we look into 2023, the picture is mixed. On the one hand, global developments should contribute to a retrenchment in consumer prices; on the other, European consumers aren't likely to benefit from it until the second half of the year. Under these conditions, it is difficult to see how consumer spending will recover, although forecasts point to a possible rebound by yearend. The trade-offs and behavioral shifts that became apparent in 2022 will continue in the new year. For instance, as gasoline prices quickly rose during the spring, it became apparent that there was little room to cut back on items such as gasoline, transportation, heating, and utility bills in general. Consumers took a wait-and-see approach in an effort to accommodate higher energy prices without cutting back on other expenses.

The resilience in retail sales, though, masked some important adjustments that were happening in consumption baskets, where higher energy prices squeezed both discretionary and non-discretionary dayto-day spending. This was especially obvious in Visa's U.K. Spending Momentum Index, which as early as February 2022 revealed the size of the shift towards gasoline spending to the detriment of almost all other items. The size and frequency of purchases is another interesting development. Under current economic conditions, we would expect consumers to purchase in bulk as a hedge against rising prices. However, the opposite seems to be the case. Evidence in Europe suggests that families are parceling out their shopping, making more frequent but smaller retail transactions. This probably reflects a journey of adjustment to inflation: behavior that is consistent with a more guarded consumer who is keen on gaining better control over their cash flow and more tightly manage their family budget.

Conscious budgeting and debt avoidance will be paramount, making it unlikely that consumption will regain full steam as inflationary pressures recede. It may take some time for consumers to rebuild their confidence, considering the large shock to real disposable income inflicted by double-digit inflation at 11 percent. As the consumer remains guarded, discretionary baskets will suffer the most, while nondiscretionary, day-to-day spend will account for a larger share of total spend.

On the upside, household savings first accumulated during the pandemic remain elevated, with record high levels of retail bank deposits in the European banking system. Inflation has dented their purchasing power, though, and while dissaving may help families to navigate the challenges of the coming months, they won't avoid the pain altogether. Going forward, it is likely that the consumer will maintain some of the same attitudes adopted during these "cost-of-living" crisis months.

Travel might provide a glimmer of hope, though, for household spending. Travel stayed rather robust through the summer in what came to be know as *"revenge travel,"* prompted by two years of reduced mobility. This provided an important boost to the economies of countries such as Greece, Turkey, and Italy, which rely heavily on summer tourism. Whether the more favorable conditions of 2022 will persist into summer 2023 is still unclear at this point.

While 2023 is shaping up to be another difficult year for the global economy—and perhaps Europe especially the fallout from the current high-inflation environment, combined with a more penny-pinching consumer, high savings and tight labor markets, should all contribute to a shallow and relatively short recession looming on the horizon.

> Adolfo Laurenti Principal Europe Economist

Canada: Housing boom to bust?

Until recently, the global housing market was on a roll—with sales booming in many markets—but now abruptly is on a downward trend that could significantly impact the global economic outlook for 2023 and prospects for a slowdown in growth.

Canada, like other markets, experienced a sharp rise in housing prices, in part as a result of the pandemic and changing preferences for remote working arrangements-driving real Canadian housing prices up 31 percent between the trough in Q2-2019 to the peak in Q1-2022, according to data from the Bank for International Settlements. If Canada slips into recession in 2023, as more than half of Canadian businesses and three out of four Canadian consumers expect,⁵ a key factor determining the depth and duration of the potential downturn will be the fate of the Canadian housing market. Since the pandemic, housing has taken on an outsized role in driving growth in Canada, with residential investment being a main driver of demand during the rebound in 2021 and now becoming the main drag on growth in 2022.

The current downturn in the housing market already has caused investment to contract as the volume of homes being bought or sold has fallen. Price declines in the market have not yet been that severe but if they were to accelerate, the resulting negative wealth effects could dampen consumer spending.

In a worst-case scenario, overstretched households could be rushed into fire sales or default on their debts, triggering an even larger correction in housing prices, which in turn could lead to a financial or banking crisis, as has often been the case globally.



Canada: Housing boom to bust, cont.

In a worst-case scenario, overstretched households could be rushed into fire sales or default on their debts, triggering an even larger correction in housing prices, which in turn could lead to a financial or banking crisis, as has often been the case globally. Judging from the dynamics of this particular cycle, the most likely outcome is for Canada to face a mild downturn in housing, which should mean that the potential downturn in the Canadian economy will be on par if not shallower than previous recessions. Since the 1970s, Canada's housing market has experienced six full cycles.⁶ In all but one of these previous cycles, the fall in prices in the downcycle has been gentler than the sharpness of the rise of the preceding upcycle.

Beyond the general observations that housing supply remains tight in Canada with fewer houses available for all those who wish to own homes, several characteristics of the upturn that preceded this current downturn give reason for optimism that we should expect an ordinary if not milder turn this time around.

The rise in housing this time was not fueled by excessive risk-taking and indebtedness by households. While total household debt may have increased 16.5 percent from trough to peak, disposable income rose by 17.6 percent. As a result, household debt relative to disposable income is actually lower today than it was before this boom

started. Additionally, the most recent upcycle in housing did not lead construction firms to aggressively build new housing, which in fact grew slower than usual in previous upcycles. Instead, what drove the sharp rise in residential investment was the real estate transfer costs. The imbalances in what drove the current upturn leads to an interesting observation with global implications.

The recent rise in housing prices was most likely driven not by unrealistic speculation on the rise in the value of real estate, but rather a changing preference of homeowners to live in larger units resulting from the rise in remote working arrangements. This changing preference contributed to the sharp rise in prices in areas outlying the main central business districts. Countries where workers now work more days away from the office, such as Canada, Australia, the United States, and the Netherlands, were the ones that saw the greatest increase in prices since the second quarter of 2019. And if remote working arrangements are maintained post-COVID, the gains so far should most likely persist, with a milder housing market correction than previous downcycles.

> Richard Lung Principal Global Economist



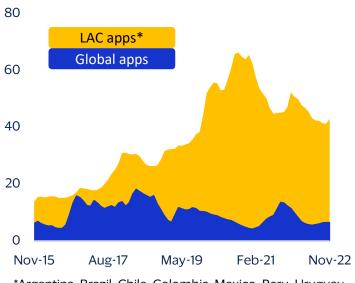
LAC: E-commerce gains

As interest rates rose over the past year, public and private investors started to revalue once high-flying technology firms around the world, leading to trillions of dollars in investment losses and mounting layoffs in the sector. While the impact of this downturn in tech has been felt the hardest in more mature markets such as the United States and Europe, it is also radiating outward and touching regions that were later to adopt digital technologies, such as Latin America. While the renewed focus on capital discipline will cause some retrenchment in the region, the long-term future of tech and its ability to transform commerce and finance in Latin America and the Caribbean (LAC) remains bright and could be the spark that helps the region to continue surprising forecasters with its resilience.

Looking back to early in the pandemic, LAC appeared to be a region defined more by its setbacks than successes. In 2020, the region's economy shrank by 7 percent, the sharpest decline of any region during the pandemic, partly due to the disproportionately high toll the coronavirus took on its people but also due to the limited resources available to governments to cushion the economic blow from the disease. While the rebound that came after surprised on the upside the region found itself on a lower economic trajectory than prior to the pandemic.

And yet, the region holds great promise. As the world accelerates to a greener economy, LAC is home to the lion's share of many key minerals and metals needed in this transition. More importantly, new innovations powered by cutting-edge technologies are transforming the way business and finance are conducted in the region. With time, they could unlock the productivity needed to power the region further ahead into the future.

Fig. 1 Top e-commerce B2C apps for LAC* (Monthly active users, in millions)



^{*}Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela. Source: Apptopia,

LAC made great progress over the last two years in closing the e-commerce adoption gap separating it from more mature markets. In 2019, e-commerce's share of total retail shopping in LAC was 10 percent, according to aggregated VisaNet data. By the summer of 2020, it had risen to 16 percent as lockdowns and voluntary social distancing led shoppers to switch to online channels. While LAC's e-commerce has lost some ground since then, it still retains a higher share of retail spending today then it had prior to the pandemic, having benefited from an expanding e-commerce infrastructure and ecosystem.

Over the past two years, there has been a rapid uptake in business-to-consumer apps that have enabled a more seamless and convenient shopping experience for consumers. These innovations are based on home-grown entrepreneurship that adapts the best the world has to offer for local conditions. Consider data app usage data from Apptopia (figure 1), which shows the top e-commerce apps in LAC were homegrown platforms (31 million monthly active users) compared to those from global platforms (7 million active users).

After the pandemic, this shift in shopping behavior stuck, with monthly active app users as of August 2022 numbering a total of 49 million (of which 43 million were from local LAC apps). Moving forward, social media and gaming will play a more significant role than traditional media in reaching Latin American consumers, especially millennials and Gen Z. Social media platforms have evolved into marketplaces where small businesses and consumers come together. They will also increasingly play a pivotal role in capturing future growth, whether from new customers or new sellers.

Richard Lung Principal Global Economist

United States: The strength of the dollar

Over the course of the last year, the relentless strength of the U.S. dollar has led some countries to begin to holler. Since the start of the year, the U.S. nominal dollar index rose from 108.1 on January 3rd, peaked for the year at 125.1 in late September and stood at 116.6 following the U.S. employment report on December 2nd.

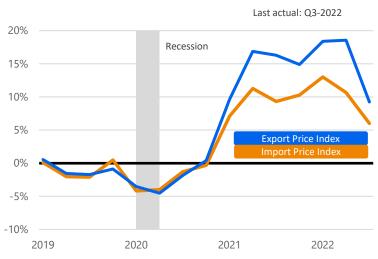
The factors driving the dollar higher this year included the persistent global inflation pressures, the aggressive pace of interest rate hikes from the U.S. Federal Reserve and, to a lesser extent, the general global risk environment (zero COVID policy in China and the ongoing war in Ukraine). The dollar's strength has several knock-on effects globally. For starters, commodities and other goods priced in U.S. dollars become more expensive around the world, further adding to global inflation pressures. One benefit of the stronger dollar to U.S. consumers this year was the less severe price appreciation for goods imported into the U.S. (figure 2). Additionally, those Americans looking to travel abroad found somewhat lower prices as the purchasing power of the U.S. dollar went a bit further in foreign economies.

Looking ahead to 2023, we suspect the U.S. dollar's strength has already peaked and will soften throughout 2023 (figure 3). Among the factors behind the softer U.S. dollar next year is the inflation pressures that are expected to slowly ease globally, meaning we are likely

close to seeing the peak in central bank policy rates around the world. The Federal Reserve, Bank of Canada, Bank of England, and the European Central Bank are all likely to slow and eventually end the process of hiking interest rates to combat inflation in 2023. While the outperformance of U.S. economic growth relative to other advanced economies helped drive the dollar's strength in 2022, in 2023, we expect the U.S. along with several other countries around the world to slide into recession. [See associated U.S. Economic Outlook] This will limit the differential in GDP growth rates globally. These dynamics should provide support to the currencies of other advanced economies and, in turn, soften the dollar's strength. The softer U.S. dollar may begin to slow imports into the U.S., which could weigh on inbound cross-border e-commerce. Additionally, the softer dollar should help to ease inflation pressures outside the U.S. as commodities priced in U.S. dollars would become less expensive to other countries.

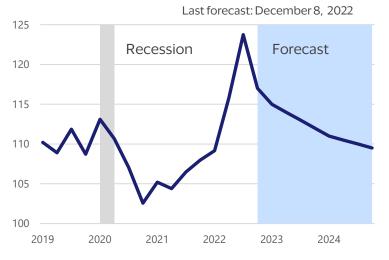
There are risks, however, to our dollar forecast. Should geopolitical issues result in another round of supply chain issues, inflation pressures may not ease as much as expected, forcing central banks to hike rates higher and keep them there for longer. If these dynamics do emerge, the dollar will likely stay stronger for a bit longer, even in light of a global economic contraction.

> Michael Brown Principal U.S. Economist



Source: Visa Business and Economic Insights and U.S. Department of Labor

Fig. 2 The cost of doing business with the U.S.Fig. 3 The dollar likely has peaked (U.S. Trade
weighted dollar index, advanced economies)(U.S. Export and Import Price Index, SA, YoY % change)Fig. 3 The dollar likely has peaked (U.S. Trade
weighted dollar index, advanced economies)



Source: Visa Business and Economic Insights and Federal Reserve Board

Asia Pacific: The China slowdown

Given that so much of the world is likely heading into recession, it would be natural to expect China to swoop in and save the day again as it has in the past. Previous global cyclical recessions have been offset by a combination of strong China stimulus spending and Asian currency depreciation, making exports more competitive. In 2023, however, we expect neither of those to occur, leaving the region vulnerable to a more abrupt slowdown than in the past, particularly if the inventory cycle bites.

in particular helped insulate Asia from the slowdowns. First was the historic role of China pump-priming the investment side of the economy (figure 4) to create domestic demand. Historically, China has needed to import commodities and capital goods for fixed-asset investment and the spill-over not only to the region but also the broader global cycle was quite pronounced. Asian currency depreciation also played a role in those cyclical downturns, with more price-conscious global consumers turning to Asia's exports and net-exports making an outsized contribution to growth.

The reason we don't expect China to pursue a countercyclical investment led response this time around is surprisingly simple. It is not because of a misallocation of unproductive capital investment, but simply because for the first time in 2022 China's population has not only stopped growing but actually declined (figure 5).

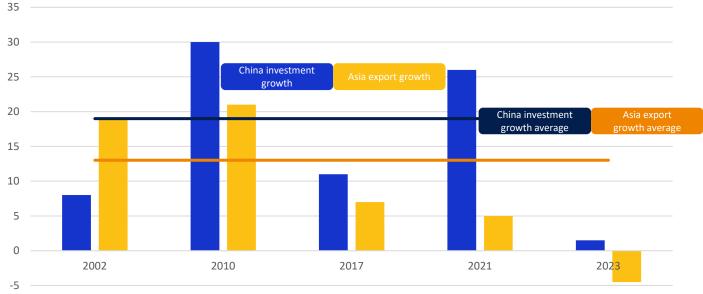
If China were to pursue an investment and infrastructureheavy growth model, it would be a misallocation of

In past global economic recessions since 1975, two things capital and weigh heavily on the long-term productivity outlook. We are increasingly of the view that China is now in the precarious position where a number of demographic and structural dividends have dried up. Whereas in previous cyclical slowdowns deeper investment in property and infrastructure made sense with a growing population, the lending response of the previous four slowdowns is no longer appropriate with a declining population and would lead to a longer-term misallocation of capital.

> Adding to the uncertainty of the outlook for Asia is the inventory cycle. In early 2023, if retailers find themselves with an excess of inventories that reflect weakening consumer demand (figure 6), they will likely reduce their inventory purchases, with cascading effects into production and employment. Asia enters the 2023 slowdown absent the historic offsets that have helped to insulate the region.

> > Glenn Maguire Principal Asia Pacific Economist

Fig. 4 Chinese investment regional goods exports have typically cushioned Asia in the first year of the global cycle downturn



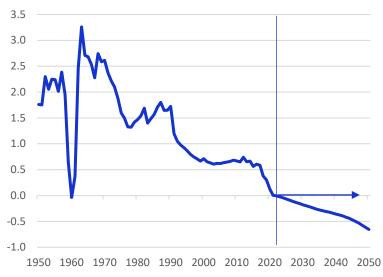
(China investment and Asia exports one year after global cycle change, YoY percent change)

Source: CEIC data and Visa Business and Economic Insights analysis

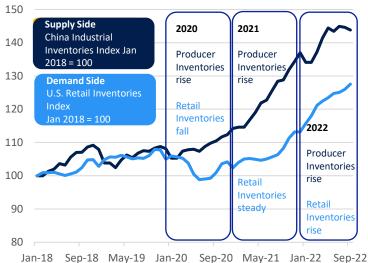
Asia Pacific: The China slowdown, cont.

Fig. 5 China population growth turned negative in 2022

Fig. 6 Supply and demand side inventory building



Source: CEIC data and Visa Business and Economic Insights analysis





CEMEA: Shifting demographics

As the current global economic slowdown deepens in 2023, attention will soon shift to spotting the end to the down cycle and the next opportunity for recovery and growth. Following the Global Financial Crisis (2007-2008), Asia Pacific contributed more than any other region to what turned out to be the longest period of uninterrupted global growth over the next decade. This time, however, Central Europe, the Middle East and Africa (CEMEA) appears poised to wear that mantle as shifting demographics and economic progress put CEMEA at center stage to lead the next wave of global growth.

In addition to the rapid uptake of new innovations, growth-enhancing macroeconomic policies and steady investment, demographics also helped Asia Pacific in its prior role. As the world went from 7 billion people in 2010 to pass the 8 billion mark in November 2022, Asia Pacific accounted for nearly half of the increase, with millions of people in Asia Pacific joining the ranks of the global middle class. Similarly, if all the right factors come together, CEMEA is expected to account for nearly 60 percent of the next billion people added to the world's population between now and 2037.

At first glance CEMEA looks less promising than other regions, considering that economic conditions in most of CEMEA (except for countries in the Persian Gulf) are expected to remain challenging in 2023, weighed down by elevated consumer prices (notably food and energy), exposure to trade disruptions from Russia and Ukraine, and rising public debt levels in a strong dollar and rising interest rate environment. Further, the impact of inflation on economic progress will perhaps be most acute in the region, as pressure from food shortages and inflation impact countries with lower per capita income levels such as those in Africa.

On the brighter side, countries within the Gulf Cooperation Council (GCC) should enjoy strong nearterm momentum, powered by a sizeable windfall from higher energy prices, elevated levels of oil production, ongoing reform momentum and strong tourism figures on the heels of hosting global events in 2022 such as the World Cup in Qatar and Expo 2020 in Dubai, UAE. Oil prices are projected to remain above the break-even point for most Gulf States, providing an additional windfall for fiscal coffers to be deployed for investment and diversification purposes.

Globally, countries that are seeing the fastest rates of population growth are based in Africa and the proportion of 'under 15 years' by region is the highest in Africa at 40 percent of the population, compared to 24 percent in Asia, 18 percent in North America and 16 percent in Europe. At the same time, the population of those 'over 65 years' is also the lowest in Africa at 3 percent, compared to 17 percent in North America, 19 percent in Europe and 10 percent in Asia.⁷ While the number of middle-class households is expected to remain relatively flat in North America and Europe by 2030 due to aging populations, it is expected to grow by 51 percent in Sub Saharan Africa (SSA) from 2020 to 2030 and by 36 percent in the Middle East and North Africa over the same period—some of the highest growth rates globally, only behind Asia Pacific.⁸

Over the medium- to long-term, however, the region's favorable demographic conditions with young, tech savvy populations and growing middle-class will play a bigger role. For example, the number of internet users increased by a staggering 143 fold in Africa from 2000 to 2022 and 63 fold in the Middle East over the same period, the fastest growth rates worldwide, while mobile penetration, including smartphones, continue to gain rapid ground across both regions.⁹

Mohamed Bardastani Senior CEMEA Economist



The culmination of these demographic and tech factors means households from CEMEA will have a growing share of global consumption going forward, affecting consumer tastes and driving consumer trends regionally and globally.



Footnotes

Sources:

¹IMF, Annual Report on Exchange Arrangements and Exchange Restrictions: 2021, March 2022. The count of central banks includes all identified by the IMF as having an inflation-targeting framework (except for Seychelles which as of January 2021 no longer maintains an inflation target) and two that have inflation targets but not a formal inflation targeting framework (the U.S. Federal Reserve and European Central Bank).

² Visa Business and Economic Insights analysis of classifications from the IMF and data from the World Bank's Global Development Indicators database.

³ Oxford Economics

⁴ Oxford Economics

⁵ Bank of Canada, Business Outlook Survey – Third Quarter of 2022, Canadian Survey of Consumer Expectations – Third Quarter of 2022 <u>https://www.bankofcanada.ca/2022/10/business-outlook-survey-third-quarter-of-2022/</u>. <u>https://www.bankofcanada.ca/publications/canadian-survey-of-consumer-expectations/</u>.

⁶ The dating of the most recent cycles follows the methodology used in Deniz Igan and Prakash Loungani, "Global Housing Cycles," IMF Working Paper 12/217, August 2012.

⁷United Nations, department of economic and social affairs population division <u>https://population.un.org/wpp/Download/Standard/Population/</u>

⁸ Visa Business and Economic Insights analysis of Oxford Economics data, <u>https://data.oxfordeconomics.com/</u>

⁹ <u>https://www.internetworldstats.com/stats.htm</u> https://databank.worldbank.org/Mobile-penetration-/id/5494af8e

Accessibility Notes

Fig. 1: Monthly active users of global apps increased from 3 mil. in Jan-2015 to a high of 18 mil. in Apr-2018, but have since declined to 6 mil. in Nov-2022. In comparison, monthly active users of local LAC apps in Argentina, Brazil, Chile, Colombia, Mexico, Peru, Uruguay and Venezuela increased from 13 mil. in Jan-2015 to 31 mil. in Apr-2018 and a high of 66 mil. in Sep-2020, to the latest reading of 43 mil. in Nov-2022.

Fig. 2: Line chart showing the year-over-year percent change in the U.S. export and import price index, with a line for the export price index and a line for the import price index. The chart begins in Q1-2019 and ends in Q3-2022. The export price index starts at 0.55 percent in Q1-2019 and declines to a low of -4.52 percent in Q2-2020 before rising to a high of 18.56 percent in Q2-2022, with the latest reading of 9.24 percent in Q3-2022. The import price index begins in Q1-2019 at 0.08 percent. It falls to a low of -4.19 percent in Q1-2020 and rises to a high of 13.01 percent by Q1-2022, then descends to 6.00 percent in the latest reading from Q3-2022.

Fig. 3: The U.S. trade weighted dollar index ranged from 110.2 in Q1-2019 to 113.1 in Q1-2020, a low of 102.6 in Q4-2020, a high of 123.8 in Q3-2022, and is forecast to decline to 109.5 by Q4-2024.

Fig. 4: China investment growth one year after a global cycle change ranged from 8% year-over-year in 2002 to 30% in 2010, 11% in 2017, 26% in 2021 and is expected to decline to 1.5% in 2023, with China's investment growth averaging 19%. In comparison, Asian export growth one year after a global cycle change ranged from 19% year-over-year in 2002 to 21% in 2010, 7% in 2017, 5% in 2021, and is expected to decline to -4.5% in 2023, with Asia's export growth averaging 13%.

Fig. 5: Line graph showing China's population growth from 1950 to 2022 and forecasted values through 2050. The chart begins in 1950 at 1.76% and drops precipitously to a low of -0.04% in 1960 before jumping back up to a high of 3.26% in 1963, then falls gradually to -0.01% in the latest reading from 2022. It is forecast to decline to -0.66% by 2050.

Fig. 6: Line graph comparing the China Industrial Inventories Index (supply side) with the U.S. Retail Inventories Index (demand side) from January 2018 to September 2022. Both lines are indexed to 100 in January 2018, then diverge in 2020 with U.S. retail inventories falling to reach a low of 98.8 and China producer inventories rising to 107.3 in June 2020. China producer inventories continued to rise at a faster rate than U.S. retail inventories, hitting a high of 144.9 in July 2022 and falling slightly to 143.8 in the latest reading from September 2022, while the U.S. retail inventories rose to a high of 127.5 in the latest reading from September 2022.

Forward Looking Statements

This report may contain forward-looking statements within the meaning of the U.S. Private Securities Litigation Reform Act of 1995. These statements are generally identified by words such as "outlook", "forecast", "projected", "could", "expects", "will" and other similar expressions. Examples of such forward-looking statements include, but are not limited to, statement we make about Visa's business, economic outlooks, population expansion and analyses. All statements other than statements of historical fact could be forwardlooking statements, which speak only as of the date they are made, are not guarantees of future performance and are subject to certain risks, uncertainties and other factors, many of which are beyond our control and are difficult to predict. We describe risks and uncertainties that could cause actual results to differ materially from those expressed in, or implied by, any of these forward-looking statements in our filings with the SEC. Except as required by law, we do not intend to update or revise any forward-looking statements as a result of new information, future events or otherwise

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