

GLISCO PARTNERS

U.S. and Mexican Economic perspectives

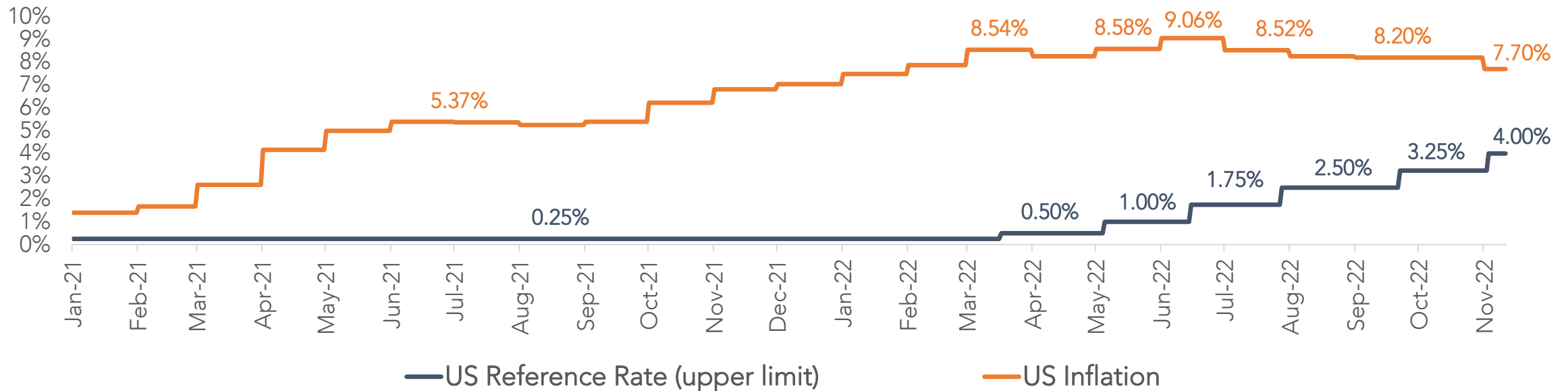
November 10, 2022

I. The United States economy and the Fed

1. The U.S. Fed was late to start tightening its monetary policy (1/3)



U.S. Fed target reference rate (upper limit) and inflation¹



- Even though inflationary pressures were clear by June 2021 (see graph), the Fed increased its reference rate for the first time until March 2022 (9 months later, by 25 bps), and it was until June 2022 when it increased rates in a meaningful way (75 bps, the first of four such increments since)
- It is relevant to highlight that, considering inflation was 5.37% back in June 2021, the reference rate in real terms was in fact negative at -5.12% , at a time in which the Fed still considered inflation to be “transitory”. After 6 consecutive rate increases by the Fed, the real rate is still at -3.7%
- For comparison, Banco de Mexico’s current reference rate is $10.0\%^2$, a 600 bps spread relative to the Fed’s rate

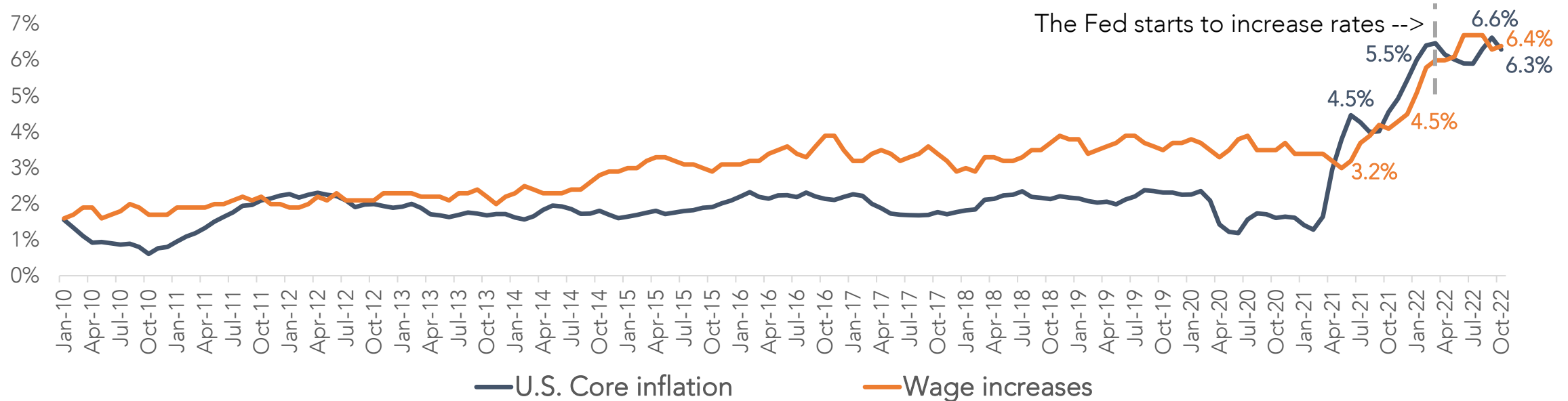
1. Sources: Board of Governors of the Federal Reserve System (reference rate) and U.S. Bureau of Labor Statistics (inflation).

2. Source: Banco de Mexico.

1. The U.S. Fed was late to start tightening its monetary policy (2/3)



U.S. core inflation and wage increases¹



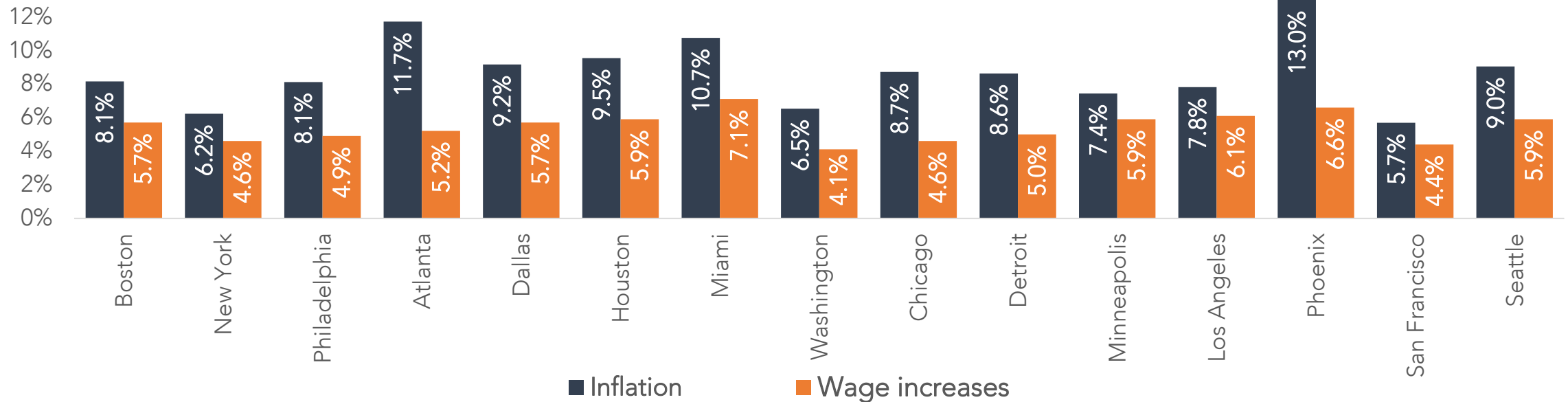
- As the Fed hesitated in 2H'21, core inflation (which excludes food and energy) kept rising, going from 4.5% in June to 5.5% in December on 2021. The increments were clear, large in magnitude and their pace was accelerating
- This rapid increase in core inflation was in part since the U.S. economy was at full employment, with wages increasing at an accelerating pace: from a 3.2% annual increase in June to 4.5% in December
 - The delay by the Fed motivated private companies to keep increasing wages
- By the time the Fed reacted in March 2022, core inflation was at 6.5% and wages were increasing at 6.0%, both remaining around these levels as of October 2022

1. Sources: U.S. Bureau of Labor Statistics (inflation) and the Federal Reserve Bank of Atlanta (wage increases). Regarding wage increases, the 3-month moving average of the median growth is considered, using annualized data.

1. The U.S. Fed was late to start tightening its monetary policy (3/3)



Inflation and wage increases in main U.S. metropolitan areas (year-on-year % increases)¹



- Even though total annual inflation in the U.S. was 8.2% as of September 2022, some major metropolitan areas are experiencing higher inflation: 13.0% in Phoenix, 11.7% in Atlanta, 10.7% in Miami and 9.5% in Houston
- Moreover, some of these metropolitan areas posted record wage increases in 3Q'22, including Miami (7.1%), Phoenix (6.6%), Minneapolis (5.9%), Seattle (5.9%) and Atlanta (5.2%). The national average for this indicator is 5.2%
- These record wage increases in some metro areas point towards continued inflationary pressures that are likely to take relatively long to dissipate (see next slide for more on this)

1. Sources: U.S. Bureau of Labor Statistics, latest data available for each city, non-seasonally-adjusted figures. For wages: Employment Cost Index for total compensation and wages and salaries, for private industry workers by area.



2. Now the U.S. Fed is playing catch up

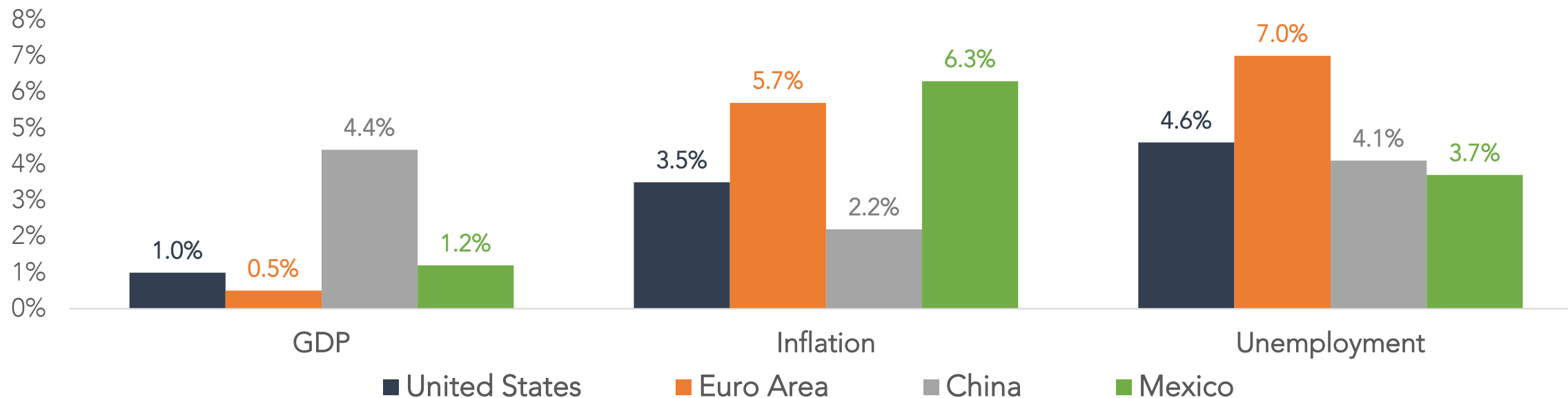
- The Fed's delay to tighten monetary policy likely resulted in a lack of trust by different market players regarding its capability and resolute to control inflation in both the short and long terms
- In order to recover part of this trust, the Fed seems to have been forced to play "catch up", hiking interest rates in a relatively sudden manner to compensate for its previous inactivity
- Now, the fact that wages are increasing >6% in annual terms generates considerable inflationary pressures since:
 - Labor contracts being negotiated get "inertia" from contracts negotiated a few months back
 - This makes inflation more "sticky" on the way down (i.e., to decrease at a slower pace)
 - This forces the Fed to make further rate increases relatively fast, increasing the probability of pushing the economy towards a recession
- Given the relative magnitude and speed of the rate adjustments since March 2022, the probability of an economic recession in the U.S. for 2023/24 has considerably increased
 - By the way, after U.S. GDP decreased for two consecutive quarters in 1H'22, it posted a 0.64% increase in 3Q'22 relative to 2Q'22, technically delaying the start of a recession until at least 2Q'23

It is important to highlight that one of the effects of interest rate increases is that the economy's aggregate demand and private consumption decrease: higher interest rates imply a higher financial cost for consumers on their existing debts (which reduces their available income) as well as on their potential additional consumer financing (makes it more expensive, lowering demand). All this reduces private consumption and thus an economy's GDP

3. IMF estimates of key macroeconomic variables



GDP growth, annual inflation and unemployment rate for 2023¹



- In line with the overall macroeconomic climate, although relatively more optimistic than most economists, the IMF estimates that global GDP growth will decelerate from 6.0% in 2021 to 3.2% in 2022 and to 2.7% in 2023¹
 - It estimates the U.S. will grow 1.0% in 2023, while the Euro Area grows 0.5%, China 4.4% and Mexico 1.2%
 - Inflation is expected to be 3.5% in the U.S., 5.7% in the Euro Area, 2.2% in China and 6.3% in Mexico
 - Unemployment is forecasted to reach 4.6% in the U.S. and 7.0% in the Euro Area. In Mexico, 3.7% is expected
- Nevertheless, a worsening of the Ukraine war and a deep and lasting U.S. recession, are considerable downside risks

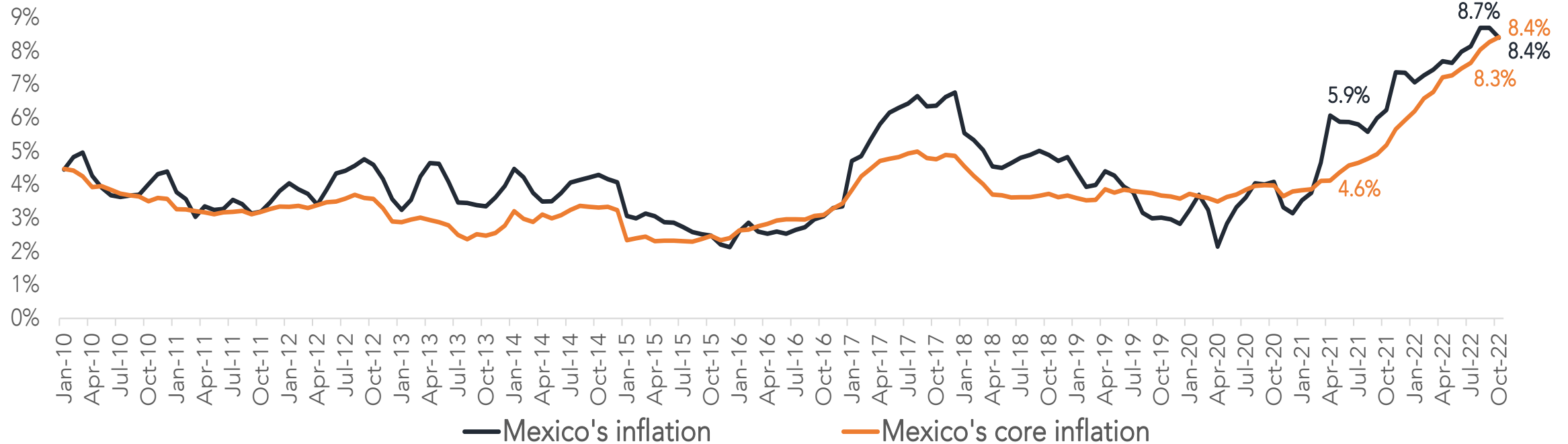
1. Source: Source: IMF's "World Economic Outlook: Report October 2022".

II. The Mexican economy



1. Inflation in Mexico also has increased considerably (1/2)

Mexico's inflation and core inflation¹

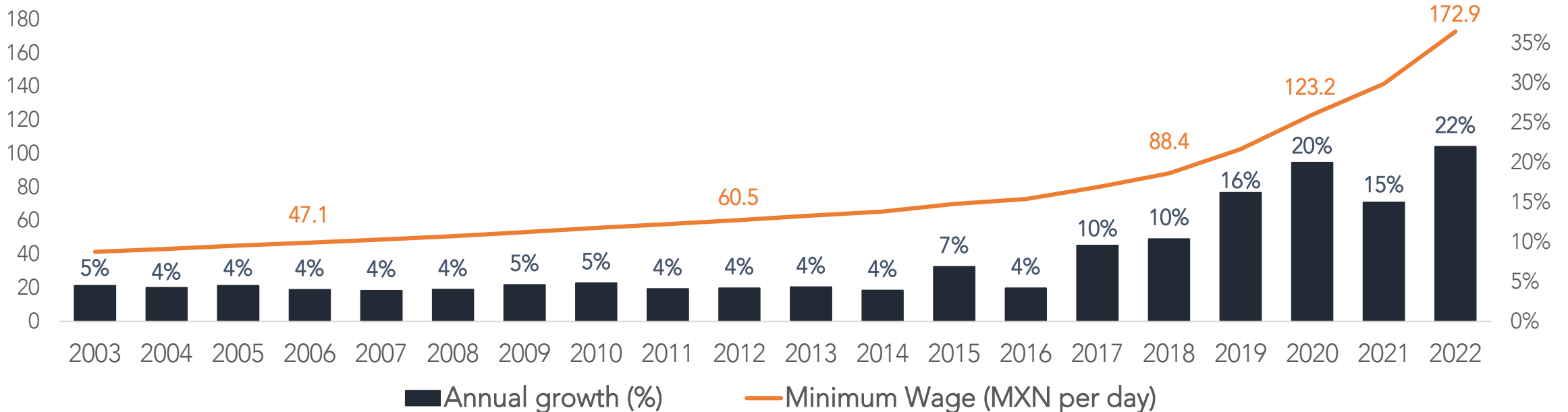


- Inflation in Mexico reached 8.7% in August and September, decreasing to 8.4% in October. Meanwhile, core inflation reached 8.4% in October (see graph)
- As is the case in the U.S., wages have been increasing in 2022 (detail on the next slide), putting upwards pressure to inflation and making it more “sticky” on its way down

1. Inflation in Mexico also has increased considerably (2/2)



Evolution of minimum wage in Mexico (MXN per day and annual growth %)¹



- The minimum wage in Mexico has had annual increments of at least 15% in the last four years
 - Consequently, it increased (in non-border zones) from MXN \$88.4 per day in 2018 to MXN \$172.9 in 2022, a cumulative growth of 95.6% in only four years (see graph)
 - A further 20% increase is expected to take place for 2023, taking the cumulative growth to 134.7% in five years
- Moreover, contractual wages increased 9.5%, 5.0% and 8.2% in annual terms in the last three months²

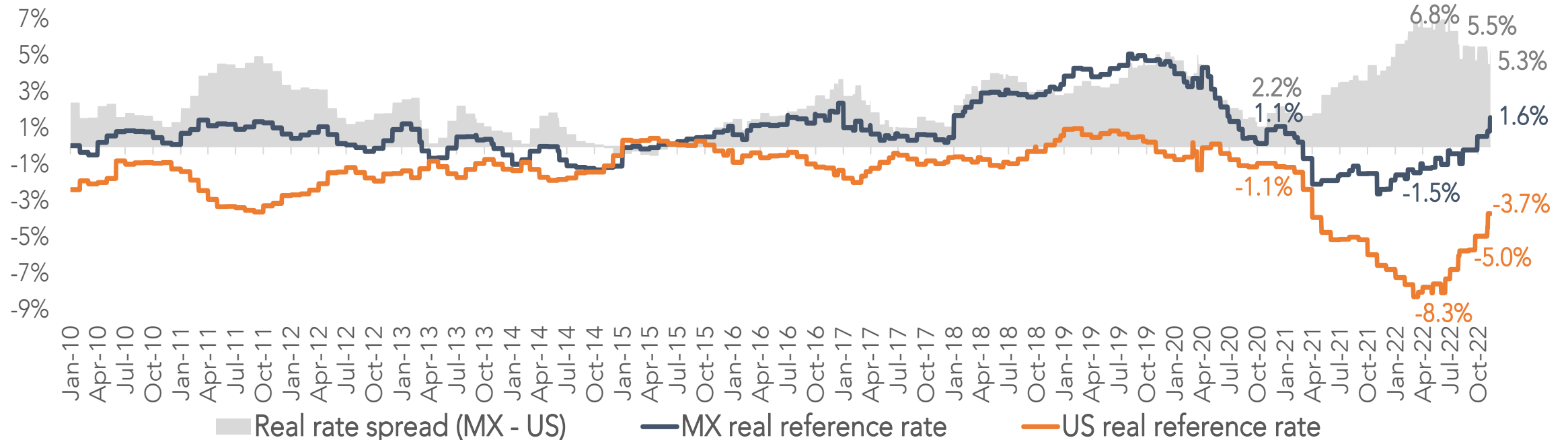
1. Source: Banco de Mexico and "Comisión Nacional de Salarios Mínimos".

2. Source: Banco de Mexico with data from "Secretaría del Trabajo". The last three months with data are July, August and September 2022.

2. Real interest rates and spreads



Fed funds target rate (upper limit) and Banxico's reference rate, in real terms^{1,2}



- A key issue to highlight is that the real reference rate spread between Mexico and the U.S. today stands at 5.3%
 - This is more than 2x the 2.5% average since January 2010, although lower than the 6.8% reached in March 2022
 - This is key to explain the relative strength of the MXN since the pandemic started

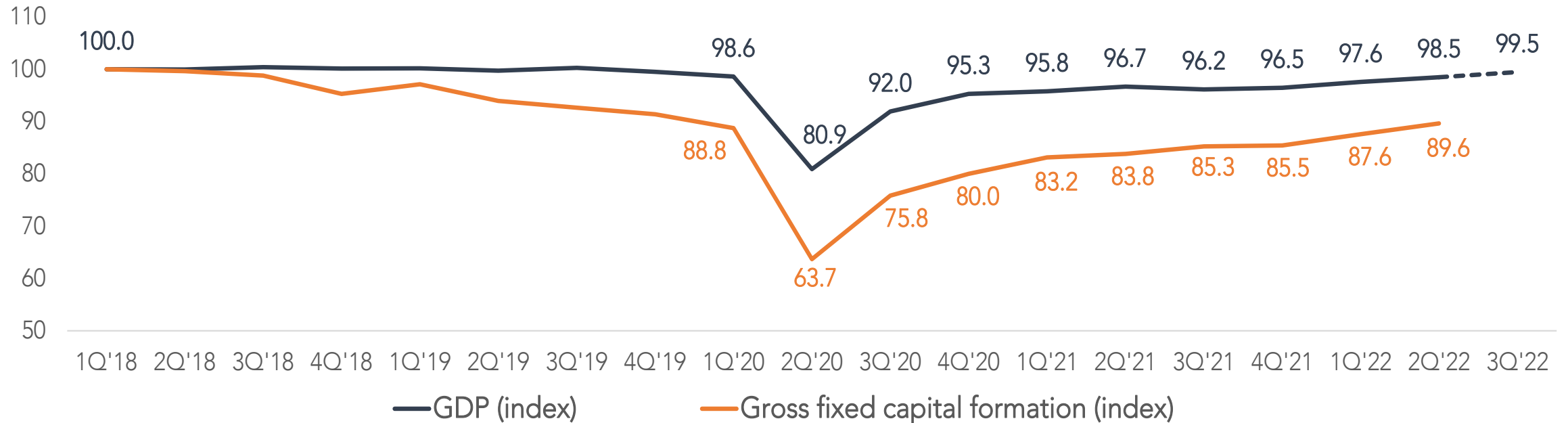
1. Sources: Federal Reserve Bank of St. Louis, U.S. Bureau of Labor Statistics, Banco de Mexico and INEGI.

2. The real rate is relative to inflation (total annual CPI change) for both Mexico and the U.S.; inflation figures as of October 2022.

3. GDP and investment



Mexico's GDP and investment (gross fixed capital formation), index with 1Q'18 = 100¹



- Relative to 1Q'18, Mexico's GDP was 1.4% lower in 1Q'20, while it is still 0.5% lower in 3Q'22
 - GDP per capita as of 3Q'22 is 4.3% lower than in 2018
- Investment has been declining since 1Q'18: it was 11.2% lower as the pandemic started in 1Q'20 and as of 2Q'22 it is still 10.4% lower

1. Source: INEGI, seasonally adjusted figures. The 3Q'22 figure for GDP is preliminary ("*Estimación Oportuna*").

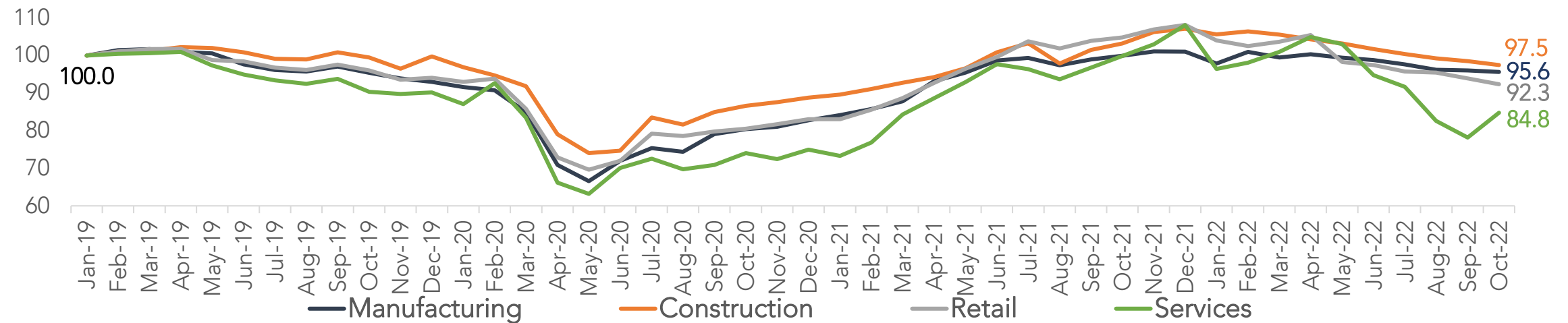
4. Consumer and business owners' confidence



Consumer confidence (index with January 2019 = 100)¹



Business owners' confidence (index with January 2019 = 100)¹

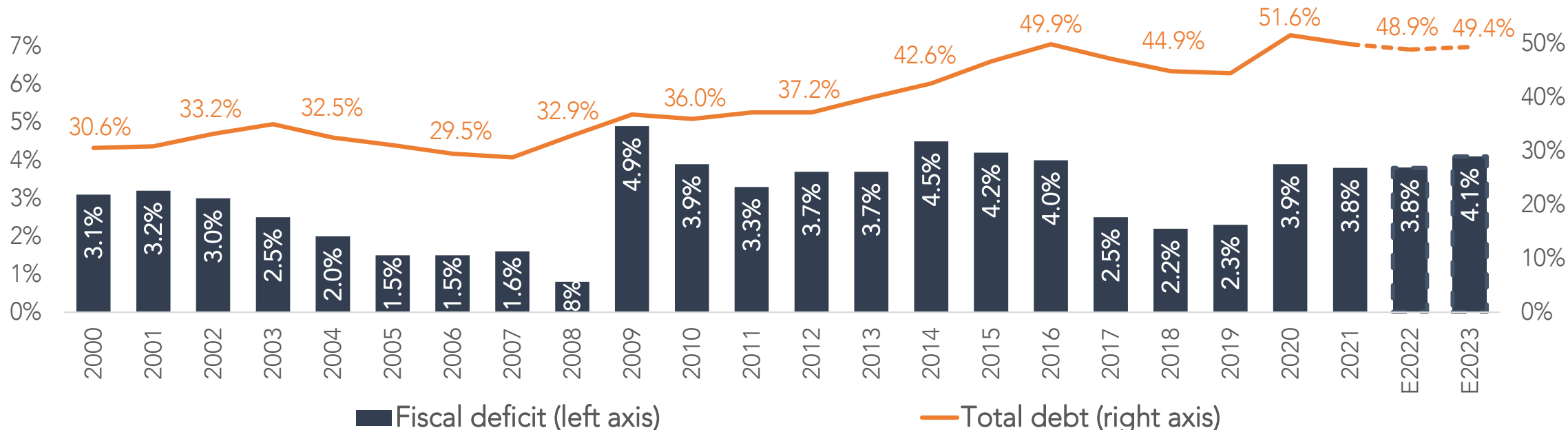


1. Source: INEGI.

5. Public finances



Fiscal deficit (RFSP) and total debt of the Federal Government (SHRFSP)¹



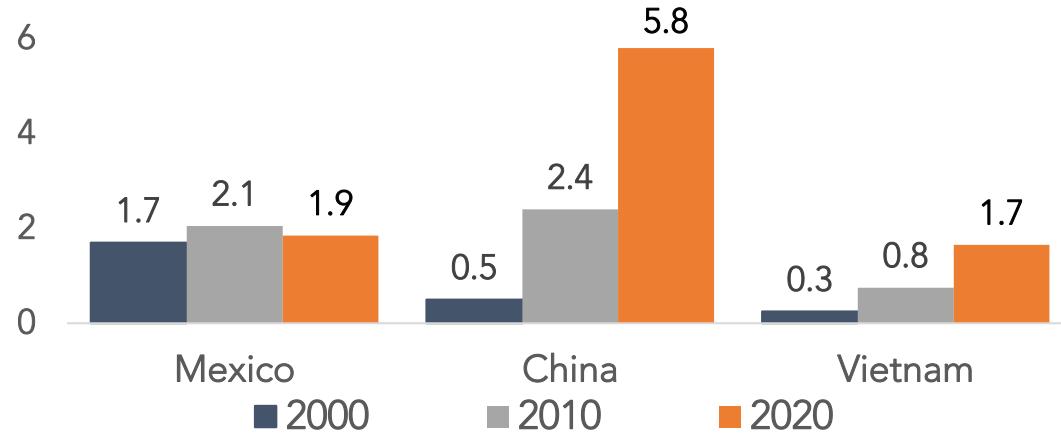
- On September 8, Mexico's Secretaría de Hacienda presented its Economic Package for 2023, where it estimates that the fiscal deficit for 2022 will be ~3.8% of GDP, while it will reach 4.1% of GDP in 2023. In these estimates, the SHCP assumes that GDP grows 3.0% in 2023 and that inflation will be 3.2%. Meanwhile, market consensus is:
 - The IMF forecasts GDP will grow 1.2% in 2023 (down from 2.5% in April 2022) and that inflation will be 6.3%²
 - Bank of America Securities forecast zero GDP growth in 2023 and a 4.6% inflation³
 - Banco de Mexico's expectation survey point to a 1.0% GDP growth and a 5.1% inflation for 2023⁴

1. Source: SHCP. 2. Source: IMF's "World Economic Outlook: Report October 2022". 3. Source: Carlos Capistrán, Mexico Chief Economist, BofA. 4. Source: Banco de México's "Encuesta sobre las expectativas de los especialistas en economía del sector privado: octubre de 2022".

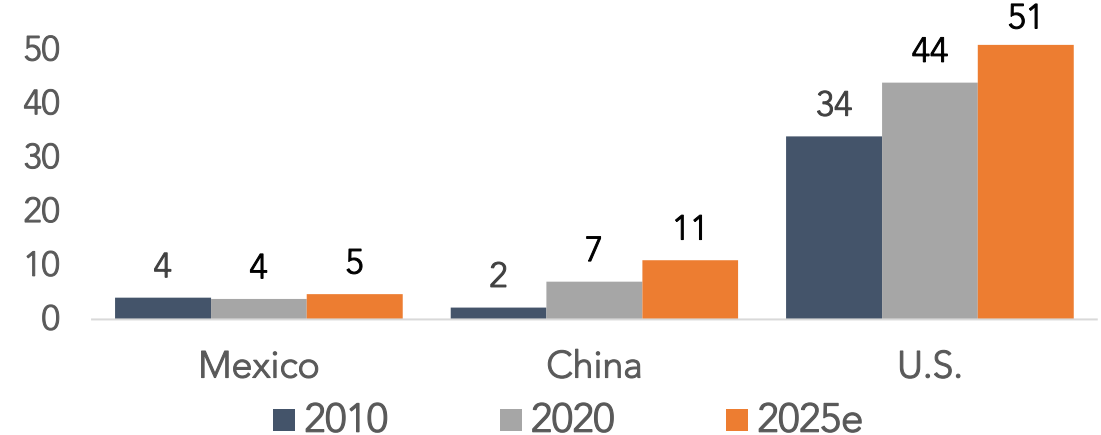
6. Mexico's competitive advantages & nearshoring



Labor costs (USD \$ / hour)¹



Average manufacturing labor cost (USD \$ / hour)¹



Mexico has several key advantages relative to China and Southeast Asia that favor nearshoring/reshoring

I. Labor costs, talent and productivity

- China's labor cost is 2-3 times that of Mexico²; Vietnam's is now basically equal to Mexico's
- Moreover, Mexico's cost advantage relative to China & the U.S. is expected to widen by 2025
- Mexico has an abundant, diverse and well-trained workforce across various industries

II. Free trade agreements

- FTAs with the U.S. & Canada (USMCA), the EU and part of CPTPP in the Pacific, among others
- Recent updates to USMCA favor Mexico's relative competitiveness in industries such as auto

III. Transportation costs and lead times

- Shipping a container from China to the U.S. costs ~3x as much as trucking it from Mexico³
- Lead times are better too: ~3+ weeks from China (currently ~15+) vs. 24-48 hours from Mexico

IV. Intellectual property

- Under Mexico's FTAs, industrial IP is protected (almost) by U.S. standards, while infringements in China are becoming more common, with policies increasingly complicating any IP defense

1. Source: The Economist Intelligence Unit.

2. The actual magnitude of the difference differs depending on the metric considered.

3. During the 2021 glut in shipping, the difference reached ~8x: ~USD \$12.0k from China to the U.S. West Coast vs. ~USD \$1.5k from Mexico (Freightos).