

Monetary and Financial Stability Review*

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1. Macroeconomic Background

Macao's economy adjusted downwards amid steep shrinkage in service exports.

As the resurgence of pandemic in neighbouring regions dampened external demand, Macao's gross domestic product (GDP) contracted by 25.2% year-on-year in real terms in the first half of 2022. The wave of local pandemic started on 18 June 2022 and the resultant "relatively static" control measures severely impacted economic activities. Real GDP thus dropped further by 33.4% in the third quarter of 2022. For the first three quarters of 2022, the local economy witnessed an annual decrement of 27.8%.

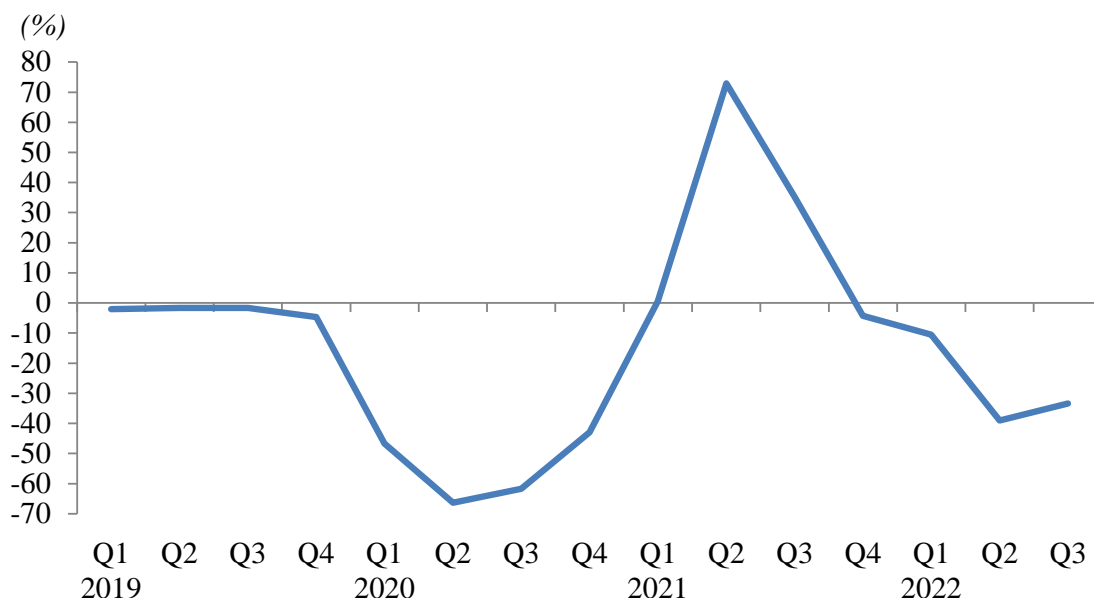
Net service exports suffered a setback as gross gaming receipts (GGR) fell sharply.

In the first half of 2022, exports of services witnessed an annual reduction of 29.4%, as GGR plummeted year-on-year by 46.2%. Of which, VIP baccarat receipts and mass-market gaming receipts recorded respective decrements of 61.3% and 38.1%. In the third quarter of 2022, the contraction of GGR widened to 70.1% as

* This review mainly applies statistics and information available as at 5 January, 2023.

affected by the “relatively static” control measures. Consequently, exports of services fell further by 46.7%. After subtracting service imports, net service exports registered an annual decrease of 58.5% and became the largest drag of the economy, with a negative contribution of 26.5 percentage points to output growth.

Chart 1: GDP Growth



Source: Statistics and Census Service (DSEC).

Net exports of goods made the largest positive contribution to economic growth. Merchandise exports and imports in GDP accounting retreated year-on-year by 34.3% and 20.1% in the second quarter of 2022. In the subsequent quarter, visible exports and imports contracted further by 43.0% and 27.9% respectively. As merchandise exports fell less than imports in absolute value, the visible trade deficit narrowed by 16.2% to MOP18.0 billion. Correspondingly, net exports of goods became the largest contributor, with a contribution of 6.2 percentage points to GDP growth.

Table 1: Main Expenditure Components' Contributions* to GDP Growth

(Percentage points)

Year	Quarter	GDP growth (%)	Private consumption expenditure	Investment [^]	Government final consumption expenditure	Net exports of goods	Net exports of services
		(1)=(2)+(3)+(4)+(5)+(6)	(2)	(3)	(4)	(5)	(6)
2019		-2.5	0.7	-3.1	0.4	0.4	-0.9
2020		-54.2	-3.9	-2.5	1.3	5.4	-53.3
2021		19.3	4.3	0.2	-0.2	-12.0	27.0
2020	1	-46.7	-3.8	-4.5	0.4	6.7	-45.7
	2	-66.3	-4.9	-1.2	1.7	6.5	-64.9
	3	-61.7	-4.4	-1.3	2.1	5.7	-61.9
	4	-43.0	-2.5	-2.8	0.8	2.8	-41.3
2021	1	0.6	6.2	3.6	-0.2	-11.6	2.5
	2	72.9	9.3	-2.3	0.8	-24.7	89.8
	3	35.2	2.5	0.9	-1.4	-15.1	48.3
	4	-4.3	0.8	-1.9	0 [#]	-3.3	0.1
2022	1	-10.5	-1.2	1.0	-0.5	-5.4	-4.4
	2	-39.0	-3.3	-4.7	-1.3	2.2	-32.1
	3	-33.4	-5.8	-8.7	1.4	6.2	-26.5

Notes: * The contribution of individual expenditure components to GDP growth is equal to the change in the expenditure component divided by GDP for the preceding year.

[^] Sum of gross fixed capital formation and changes in inventories.

0[#] Magnitude less than half of the unit employed.

Source: DSEC.

Private consumption expenditure remained sluggish while public consumption rendered support to the economy. Alongside the resurgence of pandemic, private consumption expenditure decreased by 8.1% in the second quarter and 13.3% in the third quarter of 2022. Correspondingly, this component dragged down economic growth by 3.3 percentage points and 5.8 percentage points in the respective quarters. On the other hand, public consumption expenditure rose year-on-year by 5.7% in the third quarter of 2022, as against a contraction of 6.5% in the preceding quarter. As a result, public consumption expenditure added 1.4 percentage points to economic growth.

Investment spending retreated as private sector investment shrank. Overall investment spending, i.e. the sum of gross fixed capital formation and changes in

inventories, decreased year-on-year by 10.4% in the first half of 2022. In particular, private investment dropped 18.4% whereas public investment recorded an increment of 12.9%. Attributable to a contraction of 46.8% in private investment, overall investment spending plunged by 34.2% in the third quarter of 2022. Correspondingly, this component registered a negative contribution of 8.7 percentage points to GDP growth.

The pandemic continued to pose negative impacts on inbound tourism. Macao's tourism sector experienced a downswing in the period under review, particularly during the wave of local pandemic started on 18 June 2022. Visitor arrivals retreated year-on-year by 22.9% to 5.3 million in the first 11 months of 2022. Among which, visitors from Mainland China, the top visitor source for Macao, decreased 24.1% to 4.8 million. In particular, those travelling under the Individual Visit Scheme (IVS) registered an annual decrement of 30.1%. Furthermore, arrivals from Hong Kong and Chinese Taiwan, the second and third largest sources of visitors for Macao, abated year-on-year by 12.6% and 4.7% respectively.

Visitor spending weakened in conjunction with the downturn in visitor arrivals. After an expansion of 65.2% in 2021, visitor spending, as measured by exports of tourism services in GDP accounting, declined year-on-year by 34.3% in the first three quarters of 2022. Of which, visitor spending on gaming services plummeted by 54.5% while the spending on non-gaming services dropped 29.4%.

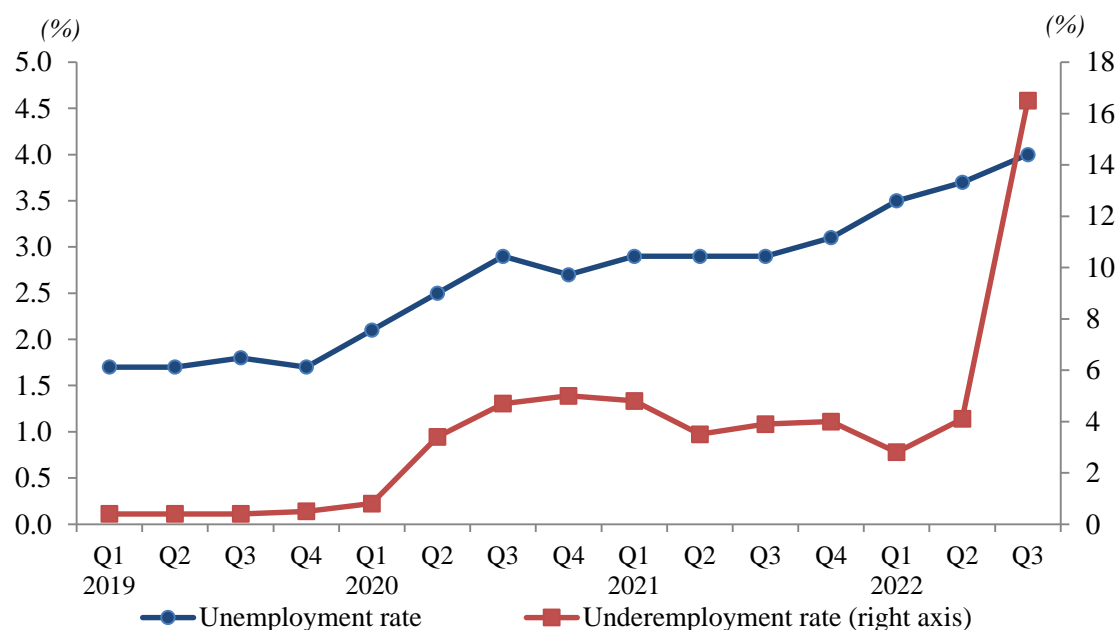
Retail sales stepped back as aggregate demand slackened. In the first three quarters of 2022, retail sales contracted year-on-year by 22.8% as consumption expenditure was enervated by weak aggregate demand. By major category, “watches, clocks and jewellery” and “leather goods” recorded notable annual decrements in sales of 30.1% and 24.5% respectively whereas “supermarkets” rose 9.4%.

Hotel occupancy lowered in tandem with decreased overnight visitors. At the end of November 2022, the number of guest rooms edged up year-on year by 1.6% to 36,650. Nevertheless, attributable to a fall in overnight visitors, the number of hotel guests was down 22.0% to 4.7 million in the first 11 months of 2022. Concurrently,

the average occupancy rate of hotels and guesthouses ebbed 11.6 percentage points to 38.0%.

The job market saw signs of improvement as the local pandemic abated. For the three-month period through November 2022, though the unemployment rate rose year-on-year by 0.9 percentage points to 3.7%, it retreated from 4.3% in June-August 2022. Correspondingly, the number of unemployed persons dropped to 14,000 from 16,300. Concurrently, the underemployment rate shrank to 4.3% in September-November 2022 from 16.5% in the third quarter amid the “relatively static” control measures (Chart 2). On the other hand, the number of imported workers reduced 9.5% year-on-year to 154,648 at end-November 2022.

Chart 2: Unemployment and Underemployment



Source: DSEC.

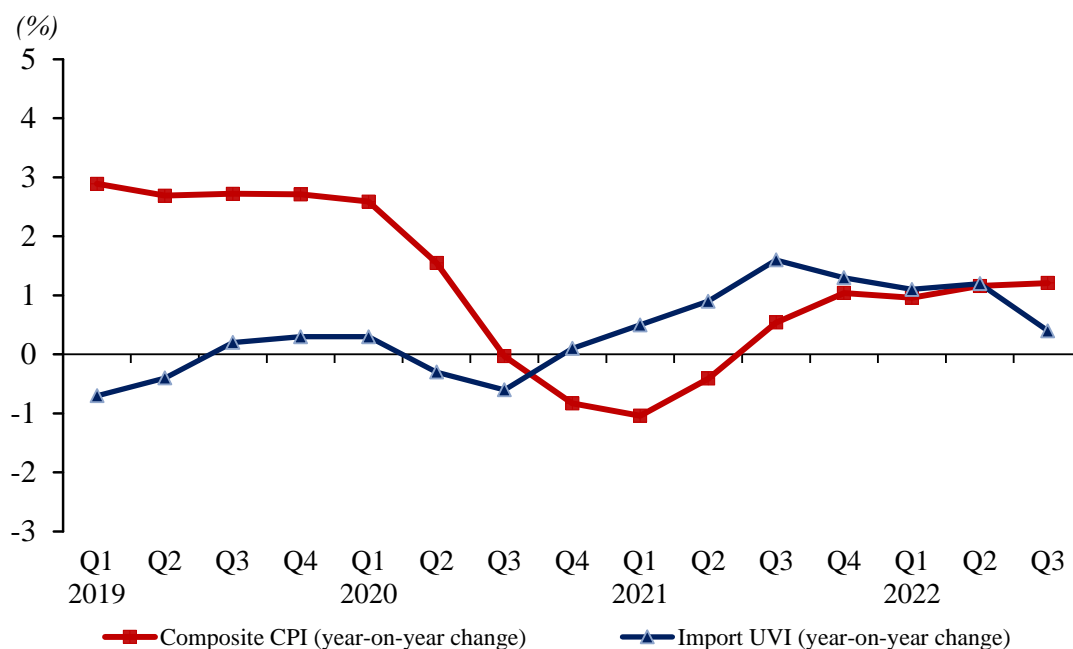
Labour income descended as demand for workers remained weak. In the third quarter of 2022, the median monthly employment earnings slid 12.5% year-on-year to MOP14,000. Those of workers engaged in “recreational, cultural, gaming and other services”, the sector with the largest share of the employed population, dropped

19.5% to MOP15,300. Concurrently, the median monthly earnings of local residents marked MOP17,000, down 15.0% when compared with the same period of 2021.

In tandem with ascending import prices, consumer prices grew moderately.

Overall import prices moved up as international commodity and energy prices elevated. The import unit value index (UVI) - a proxy for imported prices - rose year-on-year by 1.2% in the second quarter and 0.4% in the third quarter of 2022 (Chart 3). On the other hand, domestic inflationary pressures stayed mild amid weakened aggregate demand. The average composite consumer price index (CPI) increased 1.1% year-on-year in the first 11 months of 2022, as against a marginal drop of 0.1% in the same period of 2021.

Chart 3: Composite CPI-based and Unit Value Index-based Inflation



Source: DSEC.

In the first 11 months of 2022, “food and non-alcoholic beverages”, the second largest category in the CPI basket, posted a price increase of 1.7%, up from 0.2% in the same period of 2021. The price gain of “eating out”, which accounted for over half of the weight of this category, accelerated from 0.9% to 1.8%. In addition, the price

increment of “transport”, the third largest component of CPI, widened from 3.3% to 6.0%. On the other hand, the price of “housing and fuels”, the largest category, dropped year-on-year by 1.0%, following a downtick of 0.1% in the same period of 2021. The price decrement of “imputed rentals for housing”, which accounted for over half of the weight of this category, widened from 0.6% to 2.0%.

Property-market activities stayed in the downward trajectory amid the economic downturn. In the second quarter of 2022, the transaction volume of residential units dropped year-on-year by 59.0% to 793 units while the transacted value fell 64.6% to MOP4.9 billion. In the subsequent quarter, the transaction volume contracted further by 64.8% to 541 units while the corresponding value dropped 68.1% to MOP3.4 billion.

Non-resident trading activities continued to drift lower. In the first 10 months of 2022, residential units purchased by non-residents registered an annual contraction of 13.6% to 38 units while the corresponding value dropped 32.8% to MOP356.1 million. Nevertheless, the share of non-residents in the aggregate value of residential units purchased edged up 0.8 percentage points to 2.3%.

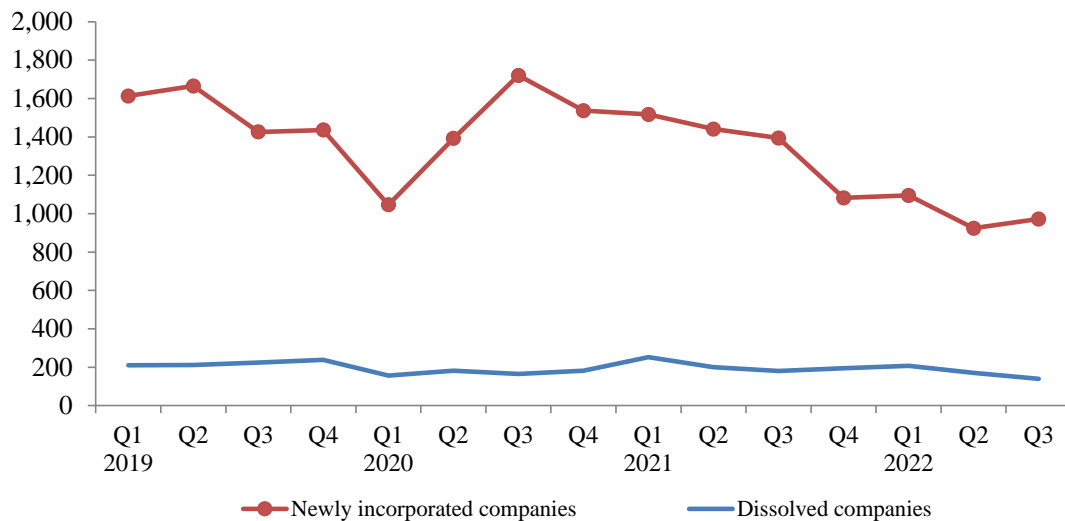
Table 2: Residential Property Transactions and Prices

Year	Quarter	Number of residential units transacted	Value of residential units transacted (MOP million)	Transaction price* (Patacas)
2019		8,277	51,049	107,522
2020		6,483	42,957	105,064
2021		6,001	40,800	103,859
2020	1	981	6,134	100,332
	2	1,971	12,694	105,134
	3	1,901	12,600	103,987
	4	1,630	11,529	108,969
2021	1	1,310	8,474	100,217
	2	1,933	13,693	105,412
	3	1,537	10,516	104,141
	4	1,221	8,116	104,865
2022	1	826	5,578	96,048
	2	793	4,852	94,800
	3	541	3,360	91,788

Note: * Figures indicate the average transaction price of residential units per square metre of usable area. Starting in 2007, the coverage of the average transaction prices has been extended to units involving payment of 0.5% of stamp duty (intermediate transfer of title) and units scheduled for value re-evaluation, in addition to units transacted as per record of stamp duty.

Source: DSEC.

Local business sentiment was weak as the economy was hit hard by the pandemic. The number of newly incorporated companies, after deducting dissolved companies, shrank year-on-year by 39.3% in the second quarter of 2022. In the third quarter, the number stood at 833, down 31.4% from the same period last year.

Chart 4: Numbers of Newly Incorporated and Dissolved Companies

Source: DSEC.

2. Assessment of Monetary Stability

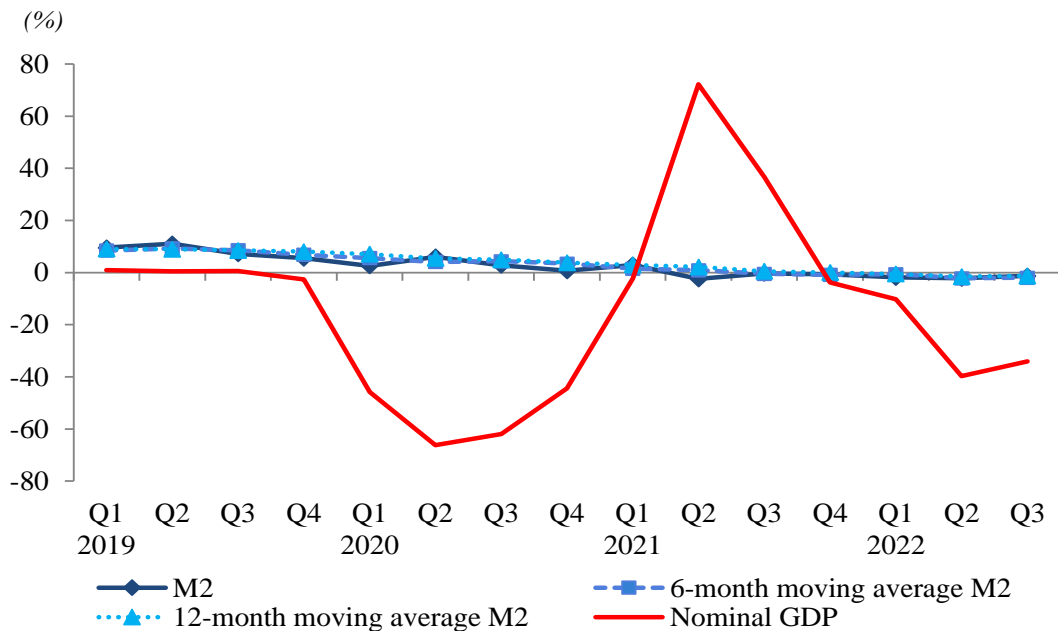
Monetary stability, as manifested by the stable exchange rate between the MOP and the Hong Kong dollar (HKD) in the context of free capital mobility, is the prime policy objective in Macao. Under the credible currency board arrangement and prudent fiscal management, the exchange rate is fixed at the middle rate of HKD1:MOP1.03. Meanwhile, the value of the MOP against the US dollar (USD) remains largely stable against the backdrop that the HKD is linked to the USD under a similar currency board arrangement.

In line with its anchor currency, the MOP exchange rate strengthened. The MOP appreciated against several non-USD currencies on an annual basis in the six months through November 2022. Correspondingly, the nominal effective exchange rate, a gauge of the MOP versus a basket of currencies of Macao's major trading partners, posted an increase of 8.9% over a year ago.

Adequate reserves affirmed the MOP's full convertibility. Macao SAR's foreign exchange reserves decreased year-on-year by 4.0% to MOP207.1 billion at end-November 2022. The MOP monetary liabilities remained 100-percent backed by foreign exchange reserves, thereby upholding the MOP's full convertibility under the linked exchange rate system (LERS).

Fiscal prudence was crucial to uphold the credibility of the LERS. The public expenditure, excluding public autonomous agencies, rose by 16.0% to MOP87.4 billion in the first 11 months of 2022 as the Government rolled out fiscal measures to cushion the impact of the pandemic on people's livelihood. Meanwhile, the public revenue, excluding public autonomous agencies, increased year-on-year by 12.4% to MOP97.4 billion, after accounting for a transfer of MOP62.7 billion from the Fiscal Reserve. The Macao SAR Government's central account fiscal balance thus dropped by 12.0% to MOP10.0 billion. In addition, the Macao SAR Government upheld its debt-free status.

Monetary aggregates contracted alongside deteriorating trade balances. The development of Macao's monetary aggregates is largely determined by its external sector's performance. The trade balance swung from a surplus in the first quarter of 2022 to deficits in the subsequent two quarters as external demand plunged, leading monetary aggregates to shrink (Chart 5). The broad money supply, M2, recorded an annual decrease of 1.2% to MOP682.7 billion at end-November 2022. Meanwhile, the narrow money supply, M1, fell year-on-year by 9.3% to MOP67.2 billion.

Chart 5: Money Supply and Nominal GDP Growth

Note: Monthly average for money supply.

Sources: DSEC and Monetary Authority of Macao (AMCM).

Growth of Renminbi (RMB) deposits with local banks accelerated. As RMB deposits held by both the resident and non-resident sectors advanced during the review period, the balance of RMB deposits witnessed a notable growth. At end-November 2022, RMB deposits with local banks reached MOP118.1 billion or RMB104.9 billion, representing an annual growth of 55.4%, as compared to 29.6% a year ago. Its share in total deposits thus went up by 3.9 percentage points to 9.7%.

Domestic credit logged slower growth. The public sector's creditor position dropped by 4.4% year-on-year to MOP315.2 billion at end-November 2022. Meanwhile, private-sector credit stood at MOP581.8 billion, with its annual expansion decelerating to 0.7% from 3.9% a year earlier. As a result, domestic credit grew at a slower pace of 7.3%, as against 35.2% a year ago, to MOP266.7 billion at end-November 2022.

Table 3: Monetary Survey

(MOP million, end of period)

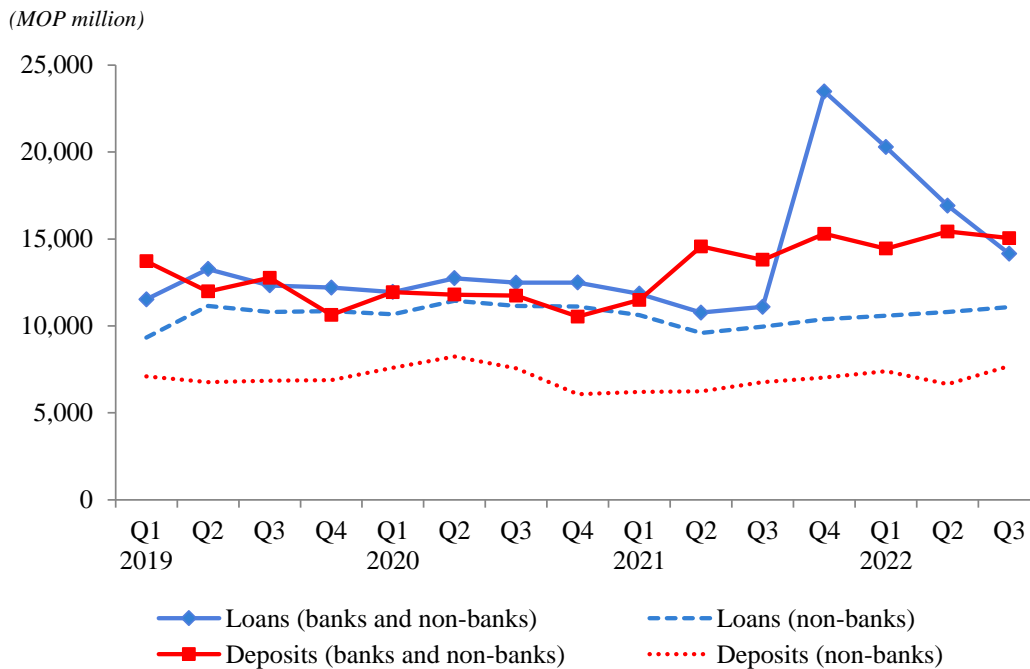
Year	Quarter	M2	Net foreign assets	Domestic credit
2019		687,520.6	730,491.3	118,698.6
2020		692,358.4	684,884.1	175,056.9
2021		687,542.1	618,184.5	250,062.5
2022*		682,745.3	588,174.0	266,668.3
2019	1	662,080.5	683,016.7	143,788.6
	2	671,570.9	697,315.6	129,533.2
	3	671,391.3	700,953.2	127,190.8
	4	687,520.6	730,491.3	118,698.6
2020	1	679,287.6	716,552.6	127,303.1
	2	712,227.0	707,532.0	166,929.7
	3	690,518.2	684,493.5	173,502.6
	4	692,358.4	684,884.1	175,056.9
2021	1	699,380.2	644,558.0	224,153.3
	2	695,097.3	613,934.7	241,526.5
	3	688,498.0	602,790.5	248,331.5
	4	687,542.1	618,184.5	250,062.5
2022	1	686,330.1	619,291.4	247,250.2
	2	680,090.7	602,137.4	251,013.3
	3	679,741.4	598,257.0	254,745.1

Note: * Figures at end-November 2022.

Source: AMCM.

MOP deposits taken from non-residents and MOP loans extended to them recorded annual increments. At end-September 2022, MOP deposits held by non-residents marked an annual increase of 9.0% to MOP15.0 billion, with those held by external banks and non-banks going up by 4.4% and 13.8% respectively (Chart 6). Meanwhile, underpinned by the surge in loans granted to external banks, MOP loans to non-residents posted an increment of 27.5% to MOP14.1billion.

**Chart 6: MOP Deposits Held by Non-Residents and MOP Loans
Extended to Non-Residents**



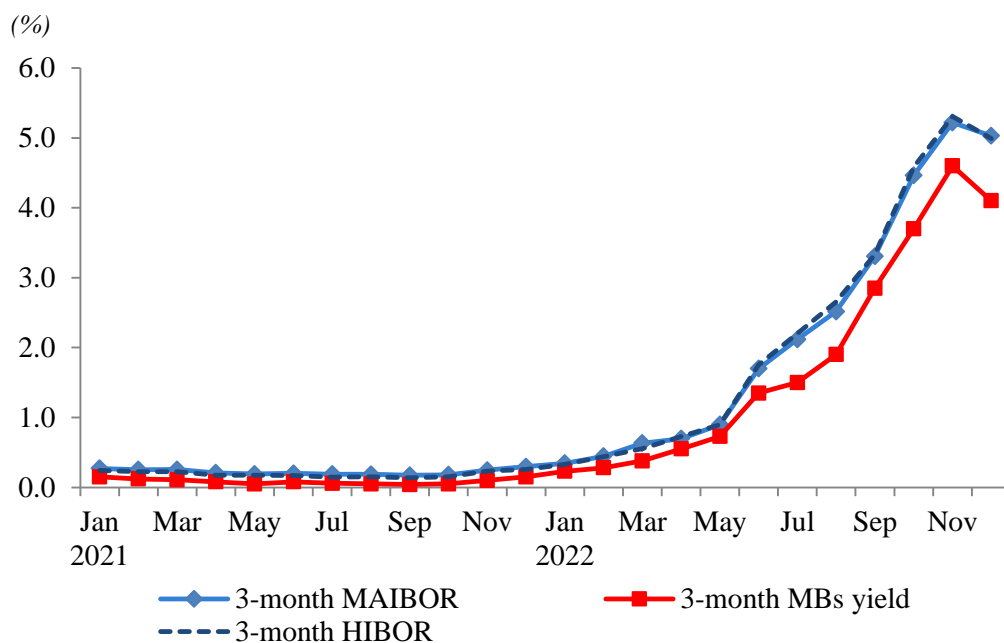
Source: AMCM.

Under the LERS, Macao's policy interest rate moved in line with Hong Kong's. In order to combat inflationary pressures, the US Federal Open Market Committee (FOMC) hiked the target range for the Fed funds rate seven times in 2022, by a total of 425 basis points to 4.25%-4.50%. The policy interest rate of Hong Kong was uplifted correspondingly amidst the LERS between the HKD and the USD. Given the MOP's link to the HKD, Macao's Based Rate was raised in line with that of Hong Kong, reaching the level of 4.75% at end-2022.

Market interest rates in Macao broadly moved up alongside the policy rate hikes. At end-2022, the 3-month Macao Interbank Offered Rate (MAIBOR) and the 3-month yield of monetary bills rose from 0.30% and 0.15% from a year earlier to 5.03% and 4.10% respectively (Chart 7). On the front of retail interest rates, the prime lending rate was raised to 5.625% while the 3-month time deposit rate was increased to 0.44% at end-November 2022 (Chart 8). At end-September 2022, the MOP and HKD composite interest rates, measures of the average funding costs for

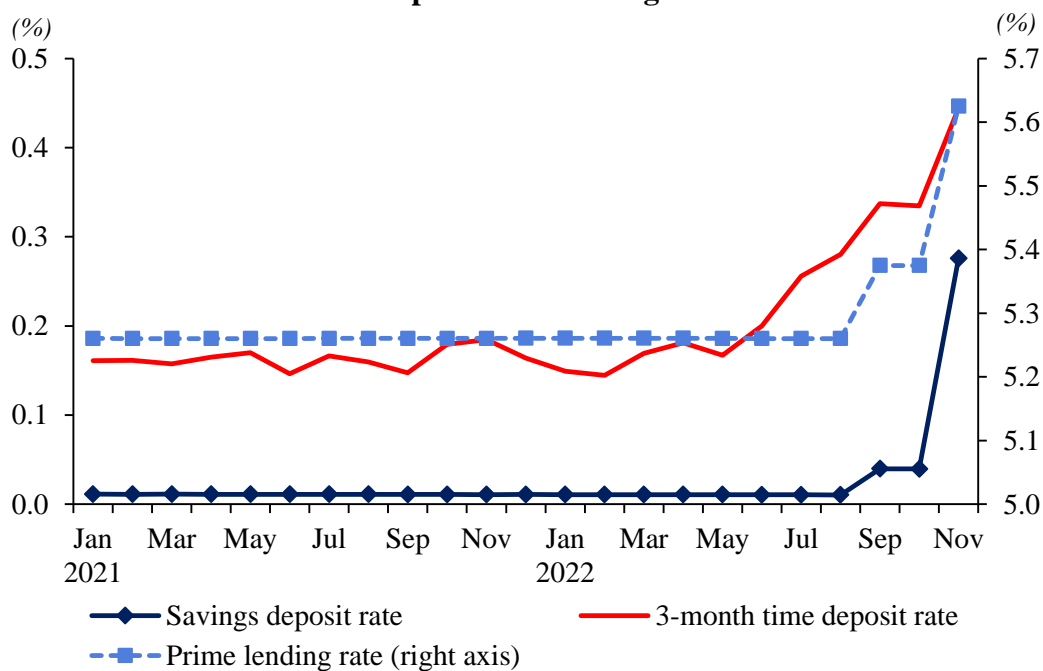
banks, increased by 40 basis points and 89 basis points over a year earlier to 0.88% and 1.71% respectively (Chart 9).

Chart 7: Monetary Bills Yield, MAIBOR and HIBOR

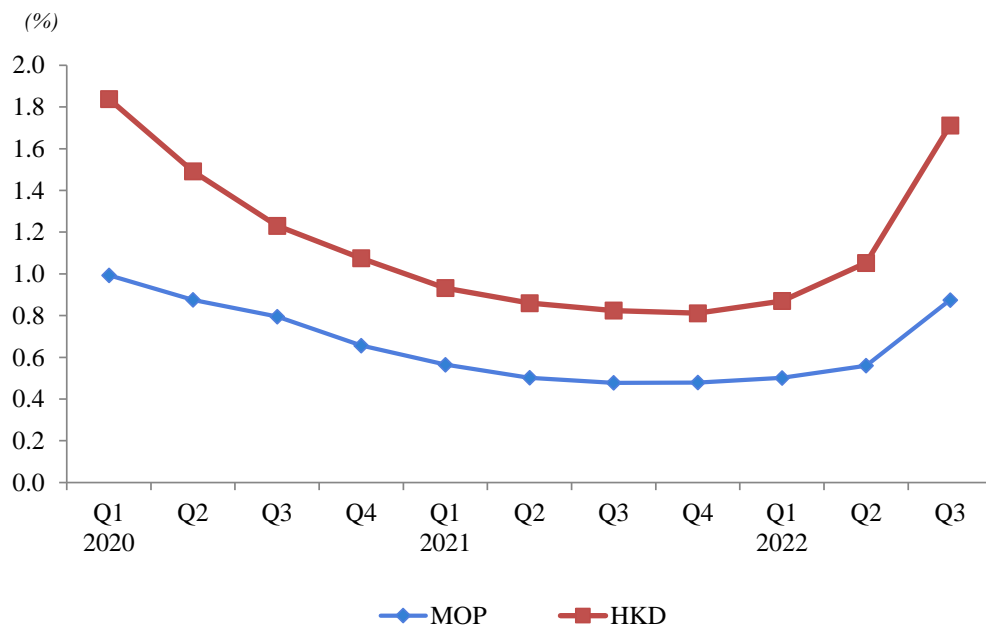


Note: Period-end figures.
Sources: Hong Kong Monetary Authority and AMCM.

Chart 8: Deposit and Lending Interest Rates



Note: Rates are weighted averages provided by sampled banks.
Source: AMCM.

Chart 9: Macao's Composite Interest Rates for MOP and HKD

Source: AMCM.

3. Assessment of Financial Stability

Banks' gross income retreated as both net interest income and non-interest income recorded decrements. In the first three quarters of 2022, interest margin or net interest income dropped 6.4% year-on-year while non-interest income fell 4.3%. Gross income, the sum of interest margin and non-interest income, hence registered an annual decrease of 5.8%. With interest margin contracting at a faster pace than gross income, the ratio of interest margin to gross income moved down 0.5 percentage points to 71.3% (Table 4).

Interest margin declined as funding costs rose faster than interest income. In the first three quarters of 2022, the income from credit operations grew by 15.7% year-on-year to MOP38.3 billion. Meanwhile, the cost of credit operations moved up relatively faster by 39.7% to MOP22.2 billion. Thus, interest margin shrank 6.4% to MOP16.1 billion.

Table 4: Indicators of Banks' Earnings and Profitability

(%)

Year	Quarter	Return on assets	Return on equity	Interest margin to gross income	Non-interest expenses to gross income
2019		0.9	19.8	73.1	35.7
2020		0.8	17.8	71.6	33.4
2021		0.7	16.0	71.3	32.9
2022*		0.5	11.9	71.3	35.3
2019	1	0.8	18.7	71.0	35.1
	2	0.9	19.8	75.2	33.1
	3	0.9	20.9	71.3	34.2
	4	0.9	19.8	74.9	40.7
2020	1	0.8	17.5	71.8	32.1
	2	0.8	17.9	73.8	31.0
	3	0.8	19.0	70.6	30.9
	4	0.8	17.8	70.5	39.0
2021	1	0.9	19.7	69.3	29.5
	2	0.7	17.2	74.7	32.6
	3	0.8	19.0	71.5	30.5
	4	0.7	16.0	69.7	39.2
2022	1	0.6	14.3	69.8	34.8
	2	0.6	14.3	68.9	35.9
	3	0.5	11.9	75.2	35.3

Note: * Figures for the first three quarters of 2022.

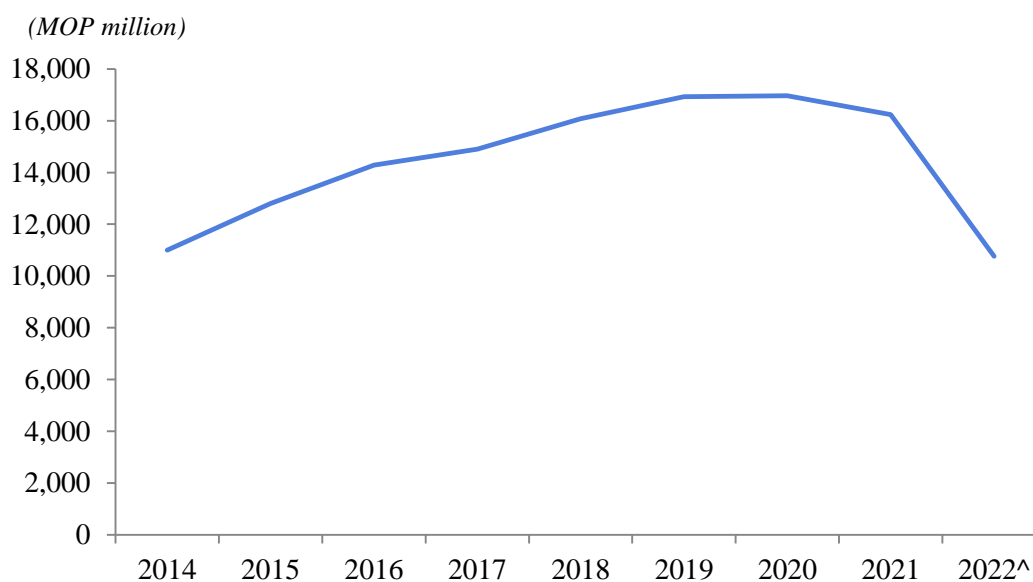
Source: AMCM.

Banks' non-interest income shrank whereas non-interest expenses witnessed increases. In the first three quarters of 2022, non-interest income dropped 4.3% year-on-year to MOP6.5 billion, mainly attributable to the decrement of gains from securities investments. On the other hand, non-interest expenses grew 7.9% to MOP8.0 billion owing to broad-based increments in items other than personnel costs. As non-interest expenses expanded whereas gross income contracted, the ratio of non-interest expenses to gross income thus rose 4.5 percentage points to 35.3%.

Profitability indicators of local banks weakened. In the first 11 months of 2022, local banks' operating profits plummeted by 32.0% year-on-year to MOP11.6 billion as a result of falling income and rising operating costs. The rise in operating costs was mainly attributable to the notable increase in provision allowances following the implementation of International Financial Reporting Standards No. 9. In the third

quarter of 2022, the annualised return on assets (ROA), a measure of banks' efficiency in utilising their assets, slipped further by 0.3 percentage points over a year ago to 0.5%. Concurrently, the annualised return on equity (ROE) fell by 7.1 percentage points to 11.9% as banks' profits contracted whereas capital expanded (Table 4).

Chart 10: Operating Profits of Banks

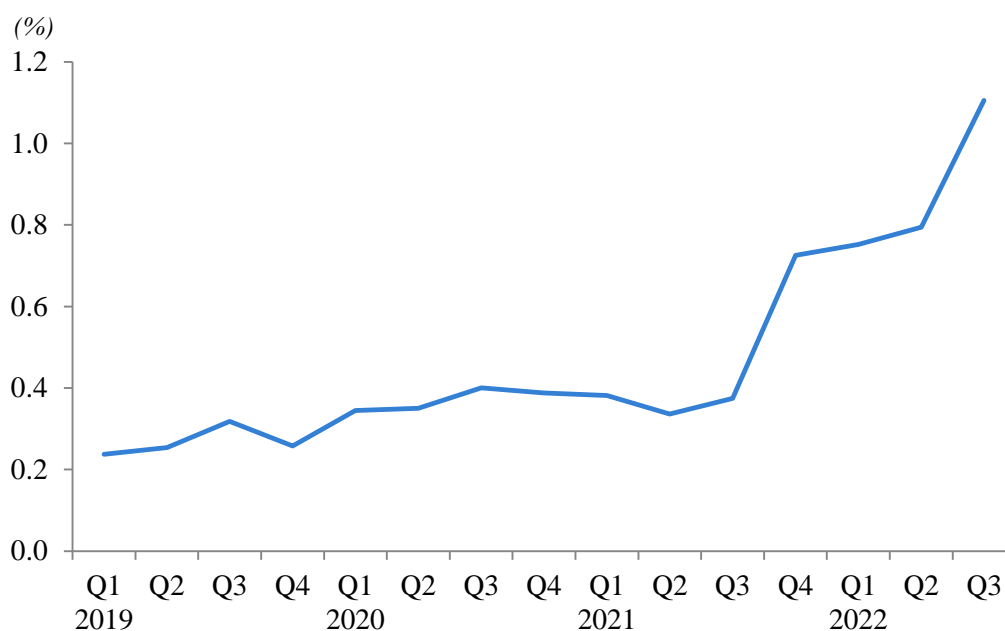


Note: [^] Banks' operating profits for the 12 months to November 2022.

Source: AMCM.

Customer loans dropped alongside the economic downturn. At end-November 2022, total customer loans declined by 3.7% year-on-year to MOP1,273.1 billion. The drop was due to a decline in loans extended to non-residents by 7.2%, which offset a modest growth of 0.9% in loans to residents.

Asset quality deteriorated slightly as indicated by a higher non-performing loan (NPL) ratio. At end-November 2022, total NPLs rose to MOP14.6 billion from a relatively low base of MOP4.8 billion a year earlier, mainly attributable to the upsurge of non-residents' NPLs which took up 63.7% of the total. Although the ratio of NPLs to total loans increased to 1.1%, it continued to stay at a relatively low level (Chart 11).

Chart 11: Non-performing Loan Ratio of Banks

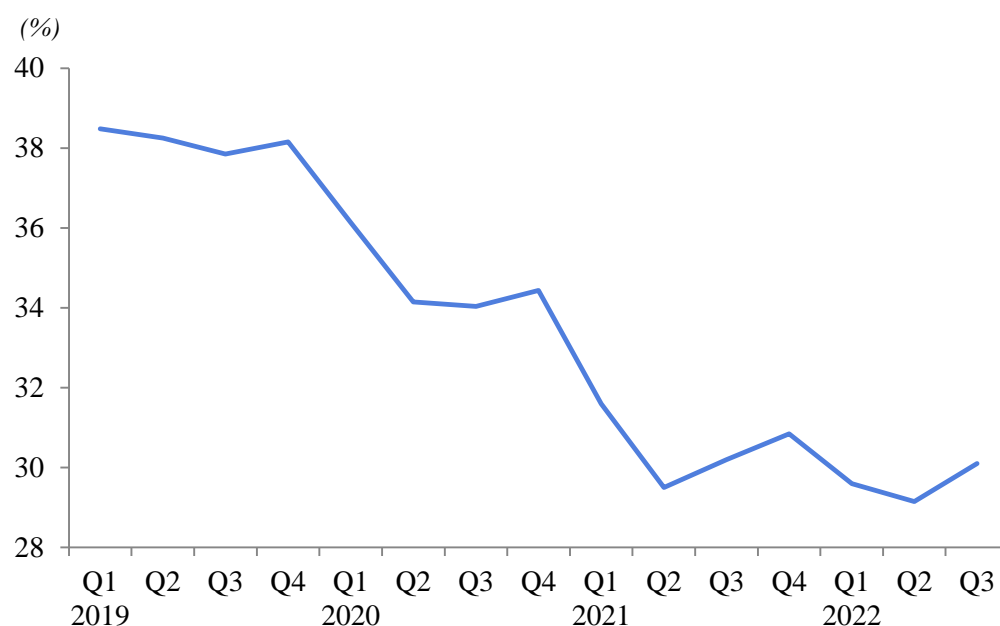
Source: AMCM.

Banks' exposure to the local property market increased while their asset quality weakened. At end-November 2022, the outstanding balance of commercial real estate loans (CRELs)¹ rose 3.4% year-on-year, offsetting the drop of 2.2% in residential mortgage loans (RMLs). Total property-related loans² thus remained virtually unchanged from a year ago. Nevertheless, the ratio of property-related loans to total private-sector loans went up by 1.2 percentage points from the preceding year to 31.3% as total private-sector loans declined, indicating a higher banks' exposure to the local property market in relative terms (Chart 12). Meanwhile, asset quality saw slight deterioration, with the delinquency ratio³ of total property-related credit rising to 0.6% at end-November 2022.

¹ CRELs refer to credit facilities provided by banks to individuals and enterprises that are collateralised by commercial real estate in Macao. They include loans to construction companies and loans to finance property development and investment (such as land development and construction of industrial, commercial and residential buildings for sale or for lease). Commercial real estate encompasses buildings, structures, and associated land (including uncompleted units) used for offices, shops, industries, hotels and tourism facilities.

² RMLs and CRELs are combined to provide a measurement of banks' property-related lending.

³ The delinquency ratio is measured by a ratio of the amount of loans that payments of interests and/or principal are overdue for more than three months to total outstanding loans.

Chart 12: Ratio of Property-related Credit to Total Private-sector Credit

Source: AMCM.

Personal non-housing loans continued to expand. At end-September 2022, personal non-housing loans extended to the private sector expanded by 4.0% year-on-year to MOP156.8 billion. Among which, credit card balances and car loans fell by 1.4% to MOP1.0 billion and 7.3% to MOP947.9 million respectively. Meanwhile, the quality of consumption credit weakened as the credit-card delinquency ratio⁴ increased 0.5 percentage points from a year earlier.

Macao banks' net creditor position to the rest of the world remained intact. At end-November 2022, banks' external assets contracted 5.8% over a year ago to MOP1,552.9 billion while their external liabilities dropped 6.7% to MOP1,184.2 billion. Hence, net external assets narrowed 2.9% year-on-year to MOP368.7 billion. In relative terms, the ratios of external assets to total assets and external liabilities to total liabilities marked 61.5% and 46.9%, down 3.8 percentage points and 3.4 percentage points respectively.

⁴ The credit-card delinquency ratio is measured by the delinquent amount overdue for more than three months to credit card receivables.

Table 5: Geographical Distribution of Banks' External Assets

(% share; end of period)

Year	Quarter	Mainland China	Hong Kong	Japan	Singapore	Portugal	United Kingdom	United States	Australia	Others
2019		35.8	30.5	2.7	2.3	1.2	1.0	1.3	0.8	24.4
2020		38.6	30.0	0.8	1.4	1.2	0.7	2.0	0.9	24.5
2021		42.3	28.2	0.8	1.9	0.7	0.4	4.5	0.7	20.5
2020	1	38.3	29.0	2.2	1.4	1.0	1.5	1.6	0.8	24.2
	2	40.1	27.8	1.1	1.3	0.8	0.8	2.5	1.0	24.6
	3	37.2	28.1	1.9	1.6	1.0	0.7	3.6	0.9	25.1
	4	38.6	30.0	0.8	1.4	1.2	0.7	2.0	0.9	24.5
2021	1	42.8	26.6	0.6	1.8	1.0	0.8	2.1	0.7	23.6
	2	45.7	27.3	0.9	1.6	0.9	0.5	2.1	0.6	20.4
	3	43.4	28.1	1.1	1.5	0.9	0.5	2.4	0.6	21.7
	4	42.3	28.2	0.8	1.9	0.7	0.4	4.5	0.7	20.5
2022	1	43.8	26.7	0.7	2.2	0.7	0.4	2.3	1.2	21.9
	2	43.1	26.1	0.8	2.1	0.5	0.8	2.2	1.2	23.1
	3	40.4	26.3	1.0	2.5	0.3	1.0	1.6	1.5	25.4

Note: External assets include international loans, holdings of external debt securities and other international assets.

Source: AMCM.

Asia was the major fund-placing destinations of Macao banks' external assets.

Although external assets placed in Mainland China dropped year-on-year by 11.4% to MOP630.3 billion at end-September 2022, with its share in the total moving down to 40.4% from 43.4%, the Mainland stayed as the largest fund-placing destination of local banks (Table 5). External assets placed in Hong Kong, the second largest fund-placing destination with a share of 26.3%, registered a decrease of 10.8% to MOP410.3 billion. On the other hand, external assets placed in Singapore, the United Kingdom and Australia increased, pushing up their respective shares in the total. All in all, the local banking sector continued to allocate their external assets mainly in jurisdictions with sound economic fundamentals and high investment-grade ratings.

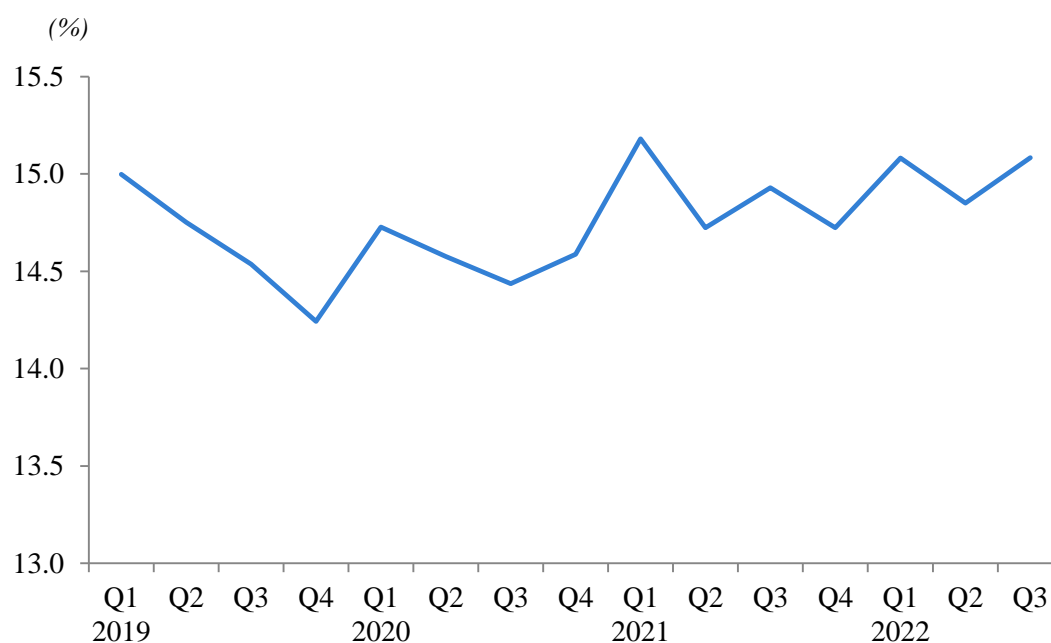
Macao banks' foreign-currency assets and liabilities basically balanced at the aggregate level.

At end-November 2022, the ratio of foreign-currency assets to foreign-currency liabilities was unchanged at 1.03 from a year ago. Non-MOP assets and liabilities were primarily denominated in the HKD, the USD and the RMB. The

asset-to-liability ratios of the HKD and the USD increased 0.10 point to 0.95 and 0.02 points to 1.18 respectively whereas that of the RMB decreased 0.17 points to 0.87.

The solvency of Macao banks remained sound. The consolidated capital adequacy ratio (CAR) for locally incorporated banks, including a government-owned postal savings bank, increased 0.2 percentage points from a year ago to 15.1% at end-September 2022. Such level was well above the minimum legal requirement of 8.0% (Chart 13). On the other hand, a modest reduction was observed in the capacity of banks' capital to withstand loan losses as the ratio of NPLs net of provisions to capital went up 2.8 percentage points year-on-year to 5.1%.

Chart 13: Consolidated Capital Adequacy Ratio of Locally Incorporated Banks

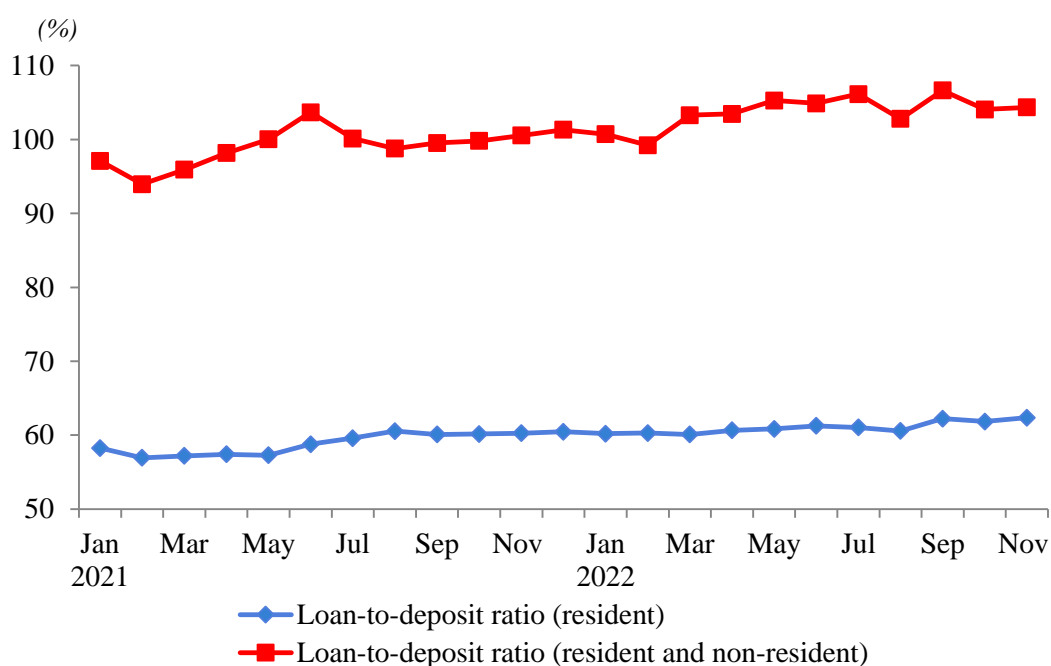


Source: AMCM.

Liquidity indicators of the banking sector witnessed mixed results on an annual basis. At end-September 2022, the ratio of liquid assets to total assets reached 33.8%, down by 6.4 percentage points from six months ago or 0.7 percentage points from a year earlier. Meanwhile, the ratio of liquid assets to short-term liabilities stood at 66.6%, down 6.2 percentage points over half-year ago but up 1.0 percentage point from a year ago.

The aggregate loan-to-deposit ratio trended upwards as the drop of customer deposits outpaced that of loans. At end-November 2022, customer loans retreated 3.7% year-on-year as the contraction of non-resident loans offset the increment of resident loans. Meanwhile, customer deposits recorded a faster decline of 7.2% from a year ago, lifting the aggregate loan-to-deposit ratio up by 3.8 percentage points from the preceding year to 104.4% (Chart 14).

Chart 14: Loan-to-Deposit Ratios



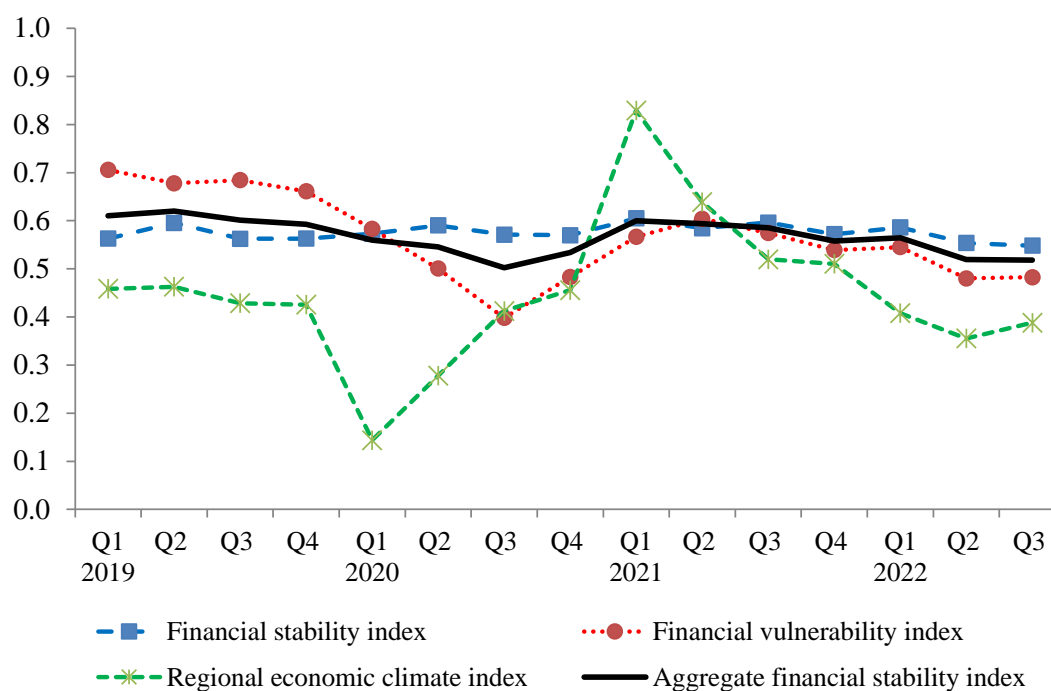
*Note: Including both private-sector and public-sector deposits.
Source: AMCM.*

Solvency of the local insurance sector remained adequate. Authorised insurance companies are required to set up a solvency margin to cover liabilities arising from business operations in Macao, which includes the provisions for liabilities related to pension funds. The solvency ratios of insurance companies stayed well above the 100% minimum statutory requirement during the review period. In particular, the total solvency ratio reached 420.8% for life insurance companies at end-November 2022 and 450.0% for general insurance companies at end-September 2022.

4. Conclusion

Macao's monetary stability has been underpinned by a credible currency board arrangement and strong fiscal discipline. The LERS between the MOP and the HKD has been stable, owing to the effective currency board arrangement and the SAR Government's commitment to strong fiscal discipline. Macao's foreign exchange reserves have been maintained at a level sufficient to cover MOP monetary liabilities, providing a strong buffer to cushion the shocks of the pandemic on the monetary system. Meanwhile, the SAR's Fiscal Reserve has enabled the Government to roll out timely stimulus measures to support economic recovery.

Financial stability has been well maintained in Macao amid the challenging environment. Notwithstanding the challenging external and domestic environments engendered by the pandemic, capitalisation and liquidity positions of the local banking sector remained sound in the review period. On the other hand, the delinquency ratio has stayed low by historical standards despite moving up slightly. On the front of the insurance sector, the solvency ratios of both life and general insurance companies were kept well above the minimum statutory requirement.

Chart 15: Aggregate Financial Stability Index and Its Sub-indices


Source: AMCM.

The aggregate financial stability index (AFSI), an in-house indicator compiled by the AMCM, marked 0.52 in the third quarter of 2022, down from 0.59 in the same period of 2021 (Chart 15). The lower AFSI was mainly driven by the weaker financial stability index, owing to declines in liquidity and profitability of local banks.

Uncertainty to global growth outlook has deepened as major central banks would face the growth-inflation dilemma. As inflation climbed to decade-high, major central banks have tightened monetary policy aggressively in 2022. Interest rate hikes and the tightening of financial conditions have exacerbated global growth slowdown. In its World Economic Outlook published in October 2022, the International Monetary Fund (IMF) revised downwards the global growth forecast for 2023 by 0.2 percentage points to 2.7%. Against the backdrop of higher inflation and weaker growth, major central banks would face heightened challenges of balancing between credibly bringing down inflation to target and safeguarding economic recovery, increasing the downside risks to global growth outlook.

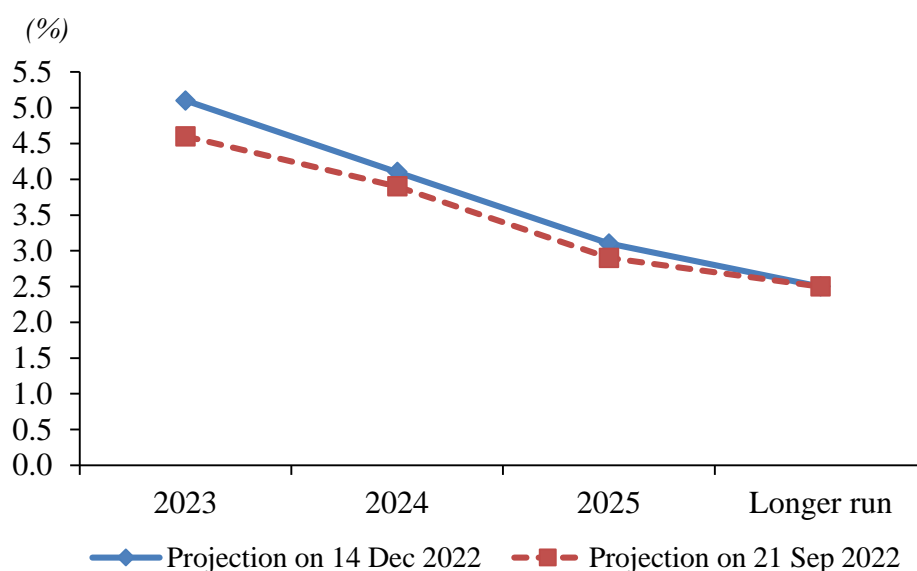
The US economic outlook would be skewed to the downside. Despite a modest rebound in real GDP in the third quarter of 2022, the FOMC has envisaged the US economy to expand at a below-trend pace, with inflationary pressures and supply constraints persisting for longer than previously anticipated. According to the Summary of Economic Projection in December 2022, the FOMC has revised downwards its real GDP growth forecast for 2023 to 0.5%, down 0.7 percentage points from the September projection. Concurrently, the inflation forecast for 2023 has been revised up by 0.3 percentage points to 3.1% (Table 6).

The FOMC would continue tightening monetary policy until it is sufficiently restrictive to bring inflation down. In light of robust labour-market conditions and inflationary pressures that showed few signs of moderating, the FOMC has anticipated that ongoing interest rate hikes would be appropriate to reinforce the goal of price stability, albeit at a slower pace. According to the latest projected policy path, the mid-point of the Fed funds rate is expected to reach 5.1% in 2023 (Chart 16). In addition, the central bank would continue to shrink its balance sheet, while the pace of reduction in securities holdings has been doubled to USD95 billion per month since September 2022.

Table 6: Median Projections of Major US Economic Variables

	(%)			
	2023	2024	2025	Longer run
Change in real GDP	0.5	1.6	1.8	1.8
Unemployment rate	4.6	4.6	4.5	4.0
Personal consumption expenditure inflation	3.1	2.5	2.1	2.0

Source: The US Federal Reserve.

Chart 16: Fed Funds Rate Projections

Notes: 1. The chart is based on policymakers' assessments of appropriate monetary policy.

2. The chart reflects the median projections.

Source: The US Federal Reserve.

Favourable prospects in service exports would underpin Macao's economic recovery. External demand is expected to pick up as Macao and its neighbouring regions have lifted entry restrictions and moved towards full re-opening of borders. Meanwhile, rigorous promotional campaigns would be deployed in attracting regional and international visitors to speed up the recovery of inbound tourism. As the new gaming concessions have come into effect in 2023, the concessionaires would roll out gradually their investment projects in non-gaming segments, generating new impetus for growth. Given the low base effect, Macao's economy is expected to rebound at a double-digit rate for the whole year of 2023. Nevertheless, as a small open economy, Macao's economic recovery would hinge on the evolution of the pandemic and development of major export markets.

The labour market is anticipated to ameliorate while consumer prices would rise moderately. In view of the promising economic outlook, labour demand is likely to increase. Moreover, the hefty share of Macao's imported workers in total employment can provide sufficient cushion for policy adjustments to preserve local employment. On the other hand, CPI inflation would rise modestly in 2023 as domestic economic activities are expected to recover.

The “1+4” diversification strategy would reinforce Macao’s economic structure and sustainable growth. The Policy Address for the Fiscal Year 2023 has unveiled the “1+4” adequate diversification development strategy, that is, to strengthen Macao’s integrated tourism and leisure industry and promote four key sectors, including the big health, modern financial services, high technology, exhibitions and conventions, commerce and trade, and culture and sports. The overall objective is to expand the share of non-gaming industries to about 60% of Macao’s GDP, so as to enhance the momentum of economic development and comprehensive competitiveness for achieving sustainable growth.

The financial sector has risen as Macao’s second largest industry, catalysing the diversification of economic structure. In line with the Macao SAR’s second Five-Year Development Plan (2021-2025), the Monetary Authority has been promoting modern financial services, including the bond market, wealth management, cross-border finance and RMB clearing. According to most updated information, the financial industry has become second-largest in Macao’s GDP, with its share in total gross value added rising from less than 4.0% in 2011 to 15.4% in 2021. As Macao’s economy progresses in accord with the “1+4” diversification strategy, the financial sector would take a vital role in driving future growth.