

Statistical Report on Cross-border Capital Flows, 2023/2024

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1. Capital Flows in 2023

For the year 2023 as a whole, Macao recorded a net capital outflow of MOP90.2 billion when excluding the financial flow of official reserve assets (i.e. Macao's foreign exchange reserves), compared to a net inflow of MOP4.6 billion in 2022. This was the cumulative effect of a net inflow of MOP3.6 billion of *direct investment*, a net outflow of MOP151.4 billion of *portfolio investment*, a net inflow of MOP0.5 billion in *financial derivatives* and a net inflow of MOP57.1 billion in *other investment*.

Table 1: Components of Capital Flows in the Balance of Payments

(MOP million)

	Total (1+2+3+4)	Direct investment (1)	Portfolio investment (2)	Financial derivatives (3)	Other investment (4)	Official reserve assets
2019	83,307.4	-40,247.4	125,775.3	-4,796.9	2,576.4	12,132.5
2020	29,959.2	63,281.1	48,160.7	-2,773.1	-78,709.5	21,328.3
2021	-49,585.6	-9,841.7	50,155.2	-2,090.5	-87,808.5	10,861.0
2022	-4,643.0	-17,080.4	28,845.3	-6,818.7	-9,589.3	-8,141.6
2023	90,162.7	-3,635.4	151,380.2	-499.5	-57,082.6	4,425.0

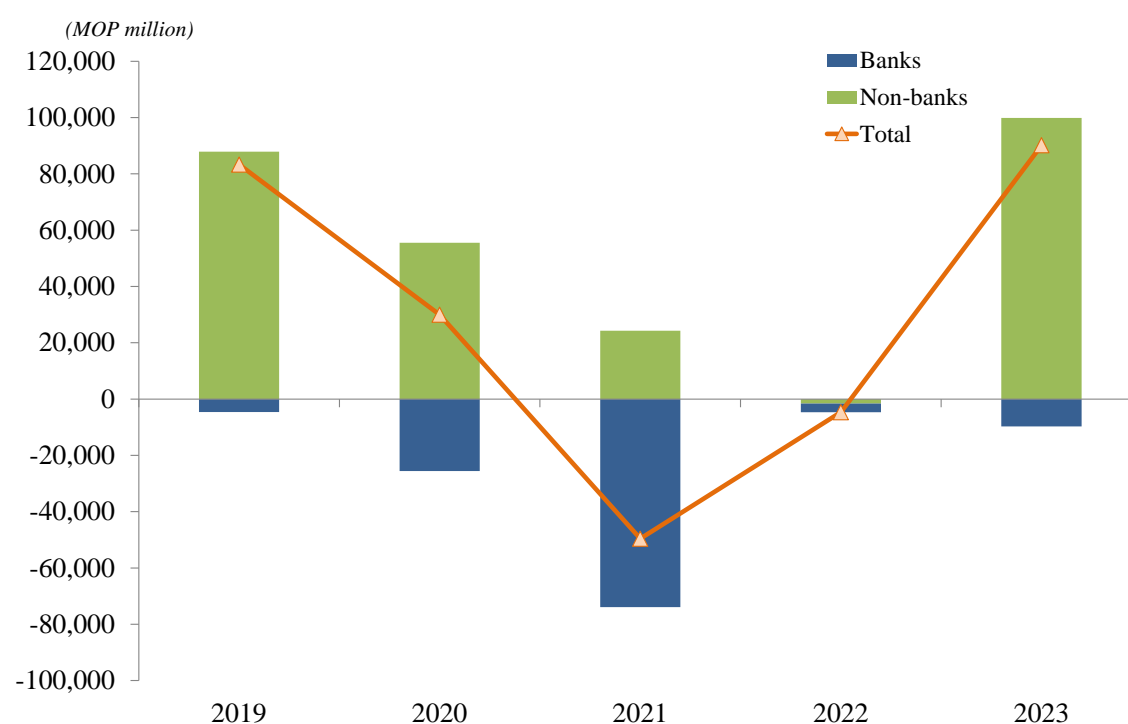
Notes:

1. All are net values.
2. Outflow is of positive sign while inflow is of negative sign.
3. Data for 2023 are preliminary estimates and subject to revision.

Sources: Balance of Payments (BOP) Statistics, Monetary Authority of Macao (AMCM) and Statistics & Census Service (DSEC).

Official reserve assets held by the AMCM, a buffer tool for absorbing Macao’s BOP surplus or deficit, totalled MOP223.6 billion at the end of 2023. An outflow of MOP4.4 billion was recorded in reserve assets in the year after excluding the effects of price and exchange rate changes and other adjustments, as against an inflow of MOP8.1 billion in 2022. Taking into account the capital flow of official reserve assets, the financial account of Macao’s BOP registered a net capital outflow of MOP94.6 billion, compared to a net inflow of MOP12.8 billion in 2022 (Table 1).

Chart 1: Capital Flows of Banks and Non-banks



Notes:

1. All are net values.
2. Outflow is of positive value while inflow is of negative value.
3. Data for 2023 are preliminary estimates and subject to revision.

Sources: BOP Statistics, AMCM and DSEC.

Analysed by sector, the banking system continued to record a net capital inflow, with the amount expanding to MOP9.7 billion; of which direct investment and portfolio investment registered net outflows of MOP1.5 billion and MOP99.4 billion respectively whereas other investment recorded a net inflow of MOP110.1 billion.

On the other hand, the non-bank sector recorded a net outflow of MOP99.9 billion in 2023 after showing a net inflow in 2022 (Chart 1).

Direct investment persisted to register a net inflow of funds, with the amount decreasing to MOP3.6 billion in 2023 from MOP17.1 billion in 2022 (Table 2), mainly due to a narrower increase in direct investment liabilities. Excluding property-related direct investment, the non-bank sector recorded a net inflow of MOP6.9 billion whereas the banking sector registered a net outflow of MOP1.5 billion. Meanwhile, non-residents withdrew a total amount of MOP1.7 billion from Macao's residential property market in 2023, up from the net outflow of MOP1.6 billion in 2022.

Table 2: Direct Investment Flows

(MOP million)

	Direct investment (Net)	Assets	Liabilities	<i>Of which: residential properties</i>
2019	-40,247.4	12,137.7	52,385.2	-2,687.6
2020	63,281.1	13,618.1	-49,663.1	-1,825.2
2021	-9,841.7	35,575.1	45,416.8	-2,119.7
2022	-17,080.4	6,566.2	23,646.6	-1,551.0
2023	-3,635.4	~	~	-1,740.5

Notes:

1. For the net value, outflow is of positive sign while inflow is of negative sign.
2. Data for 2023 are preliminary estimates and subject to revision.
3. ~ No figure provided.

Sources: BOP Statistics, AMCM and DSEC.

External securities investment remained as a major channel for Macao residents in placing their surplus fund. External portfolio assets held by Macao residents surged by MOP88.2 billion in 2023, up from the gross outflow of MOP37.7 billion in 2022, mainly due to the increase in external securities investment of the non-bank sector. On the other hand, portfolio investment liabilities turned negative (fund outflows) in 2023 mainly as short-term debt securities issued by local financial institutions and held by non-residents matured, increasing the net outflow of portfolio investment

further by MOP63.2 billion. As a result, the portfolio investment account showed a net outflow of MOP151.4 billion in 2023 (Table 3).

Table 3: Portfolio Investment Flows

(MOP million)

	Portfolio investment (Net)	Assets	Liabilities
2019	125,775.3	198,812.5	73,037.3
2020	48,160.7	78,360.4	30,199.7
2021	50,155.2	77,778.1	27,623.0
2022	28,845.3	37,742.6	8,897.3
2023	151,380.2	88,195.1	-63,185.1

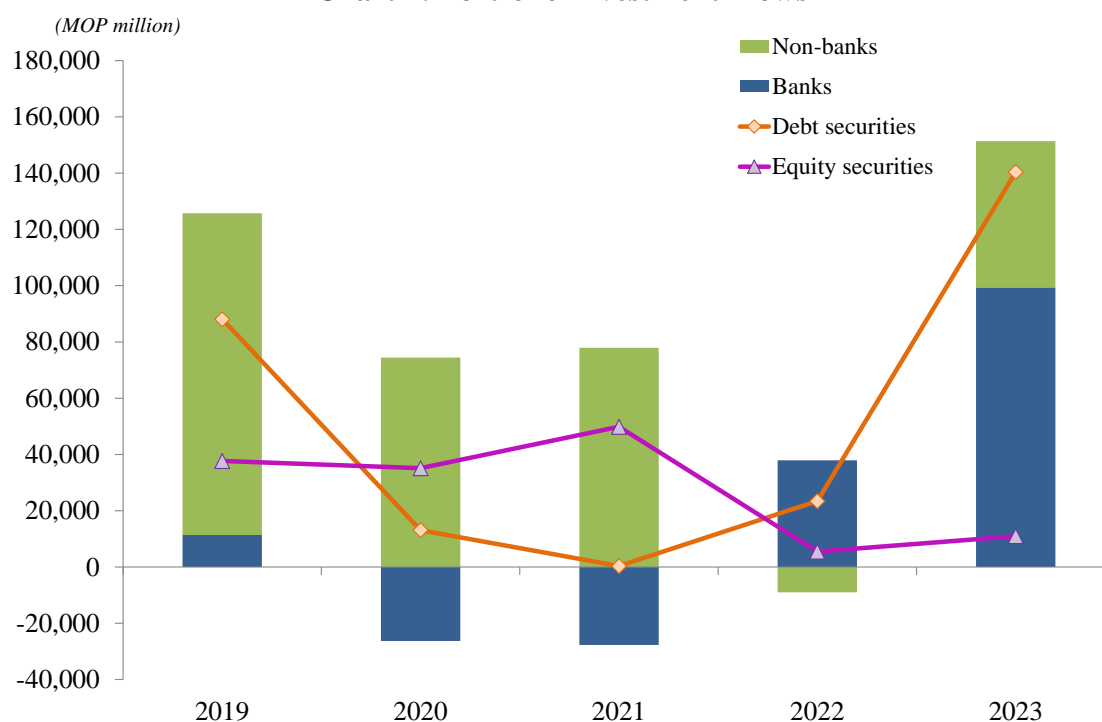
Notes:

1. For the net value, outflow is of positive sign while inflow is of negative sign.

2. Data for 2023 are preliminary estimates and subject to revision.

Sources: BOP Statistics, AMCM and DSEC.

Analysed by instruments, equity securities and debt securities in the portfolio investment account recorded net outflows of MOP10.9 billion and MOP140.4 billion respectively. Meanwhile, net external portfolio investment of the banking and non-bank sector increased by MOP99.4 billion and MOP52.0 billion in 2023 respectively (Chart 2).

Chart 2: Portfolio Investment Flows


Notes:

1. All are net values.
2. Outflow is of positive value while inflow is of negative value.
3. Data for 2023 are preliminary estimates and subject to revision.

Sources: BOP Statistics, AMCM and DSEC.

Other investment retained a net inflow in 2023, with the amount expanding to MOP57.1 billion (Table 4). Both assets and liabilities in other investment witnessed declines during the year, amounting to MOP103.9 billion and MOP46.8 billion respectively.

Table 4: Other Investment Flows

(MOP million)

	Other investment (Net)	Assets	Liabilities
2019	2,576.4	80,109.3	77,532.9
2020	-78,709.5	19,801.8	98,511.3
2021	-87,808.5	316,745.2	404,553.7
2022	-9,589.3	-185,795.8	-176,206.5
2023	-57,082.6	-103,867.7	-46,785.2

Notes:

1. For the net value, outflow is of positive sign while inflow is of negative sign.
2. Data for 2023 are preliminary estimates and subject to revision.

Sources: BOP Statistics, AMCM and DSEC.

Table 5: Components of Other Investment Net Flows*(MOP million)*

	Total	Loans		Currency and deposits		Others	
		All sectors	Banks	All sectors	Banks	All sectors	Banks
2019	2,576.4	39,739.1	22,486.9	-56,806.1	-42,853.1	19,643.4	13,938.3
2020	-78,709.5	57,737.0	70,245.2	-159,449.0	-78,152.4	23,002.5	16,721.5
2021	-87,808.5	38,785.5	45,878.8	-152,693.6	-105,006.0	26,099.6	17,771.5
2022	-9,589.3	-50,820.7	-51,803.9	55,686.4	40,852.1	-14,455.0	-10,357.9
2023	-57,082.6	~	-146,582.7	~	31,986.2	~	4,472.9

Notes:

1. All are net values.
2. Outflow is of positive sign while inflow is of negative sign.
3. Data for 2023 are preliminary estimates and subject to revision.
4. ~ No figure provided.

Sources: BOP Statistics, AMCM and DSEC.

As a major component of other investment, bank loans recorded a net inflow of MOP146.6 billion in 2023 (Table 5). At the same time, the net outflow from currency and deposits of the banking sector narrowed to MOP32.0 billion in 2023 from MOP40.9 billion in 2022, mainly due to a smaller decrease in non-resident deposits. The remaining items of other investment for the banking sector witnessed a net outflow of MOP4.5 billion.

The SAR Government's portfolio and other investment outside Macao increased in 2023 when the rebound in gaming receipts drove up its tax revenue. External assets of the government sector, mainly comprising securities and deposits, increased by MOP92.8 billion from end-2022 to MOP497.3 billion at end-2023.

Excluding the effects of price and exchange rate changes as well as other adjustments, official exchange reserve assets recorded an outflow of MOP4.4 billion in 2023, as against an inflow of MOP8.1 billion in 2022. The outflow of official reserve assets represented an overall BOP surplus with the outflow in the non-reserve financial account inadequate to balance the current account surplus.¹

¹ In theory, the BOP surplus or deficit should be equal to the change in official reserve assets. However, in practice, there unavoidably exist "errors and omissions" in BOP accounting in every economy in the world.

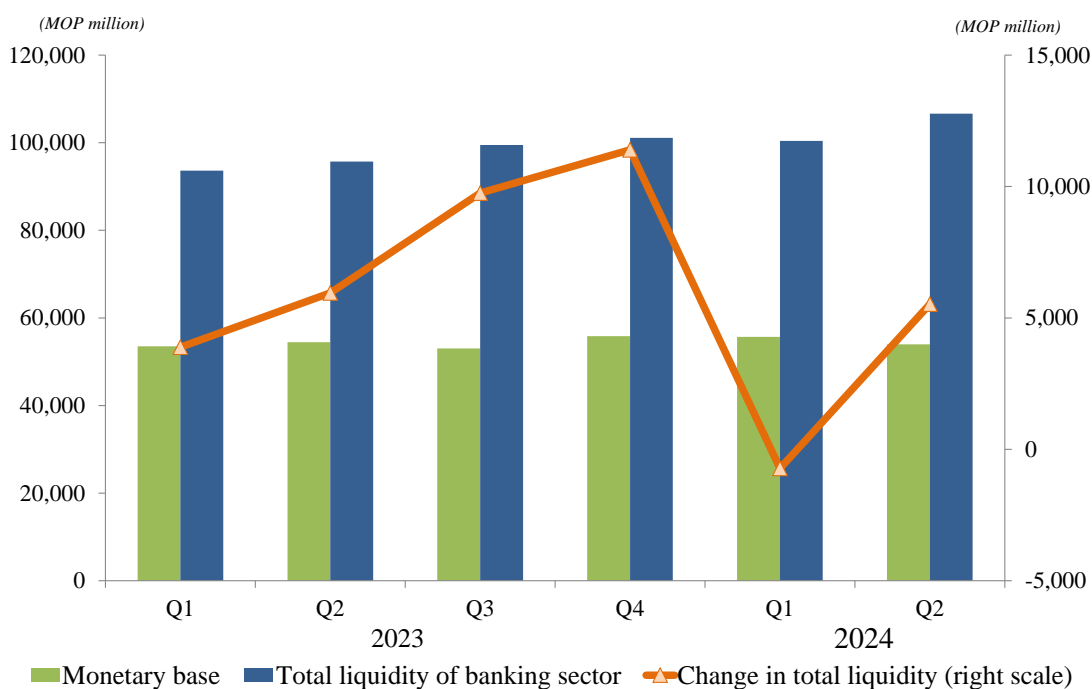
2. Capital Flows in 2024

As a full set of BOP or financial account statistics for 2024 is not yet available, relatively updated statistics of the local money market, the banking sector, the real-estate market and official reserve assets, which are components of the financial account, provide more timely information for evaluating cross-border capital flows.

Chart 3 shows the movements of the monetary base (the sum of certificates of indebtedness, coins issued and the aggregate balance of banks' liquidity accounts with the AMCM) and the total MOP liquidity balance (the sum of banks' liquidity accounts and the outstanding balance of MOP-denominated monetary bills issued by the AMCM). The total liquidity balance is the primary position of Macao banks in the MOP while its change ultimately reflects funds flowing into or out from the domestic currency and potentially the SAR, as capital inflows could raise the demand for the domestic currency whereas capital outflows could elevate the demand for foreign currencies.

In the first-half year of 2024, the monetary base fell by MOP1.9 billion from end-2023 to MOP54.0 billion at end-June 2024. At the same time, the total MOP liquidity increased by MOP5.5 billion to MOP106.7 billion, implying that funds have been flowing into the SAR.

Nevertheless, the conversion between the MOP and other currencies in the financially open economy of Macao does not necessarily denote cross-border capital flows as foreign currencies, especially the Hong Kong dollar, are extensively used for economic transactions in Macao. A broader picture of cross-border capital flows can be illustrated by the changes in local banks' foreign assets and foreign liabilities. Correspondingly, the variation in net foreign assets of the banking sector represents the net value of capital flows.

Chart 3: Monetary Base and Total Liquidity


Note: The change in total liquidity for the quarter is the difference between the end-period value and the value at the end of the previous year.

Source: Monetary and Financial Statistics of the AMCM.

As shown in Chart 1, capital flows can be segregated into flows of banks and non-banks. The monetary and financial statistics compiled by the AMCM provide the positions of local banks in foreign assets and liabilities for the current year, making timely surveillance of key capital flows of the banking sector feasible. The sector's net foreign assets, which are comprised of portfolio investment, loans, currency and deposits, interbank balances and others, suffice as the preliminary indicators for the direction and amount of capital flows before the annual BOP and financial account statistics are released.

Table 6 shows that Macao banks' net foreign assets increased by MOP49.8 billion in the first half of 2024. In other words, the banking sector recorded a net fund outflow of MOP49.8 billion during the period, compared with a net fund inflow of MOP10.4 billion in the first half of 2023. Analysed by component, portfolio investment rose by MOP57.0 billion at end-June 2024; loans, currency and deposits dropped by MOP25.0 billion owing to an increase of MOP19.9 billion in non-resident deposits

and a decrease of MOP5.1 billion in non-resident loans in the local banking system. On the other hand, net interbank assets witnessed an increase of MOP26.9 billion as interbank liabilities decreased by MOP70.3 billion, offsetting the reduction of MOP43.4 billion in interbank assets. The rest of Macao banks' net foreign assets fell by MOP9.2 billion.

Table 6: Changes in Portfolio and Other Investment of Banks*(MOP million)*

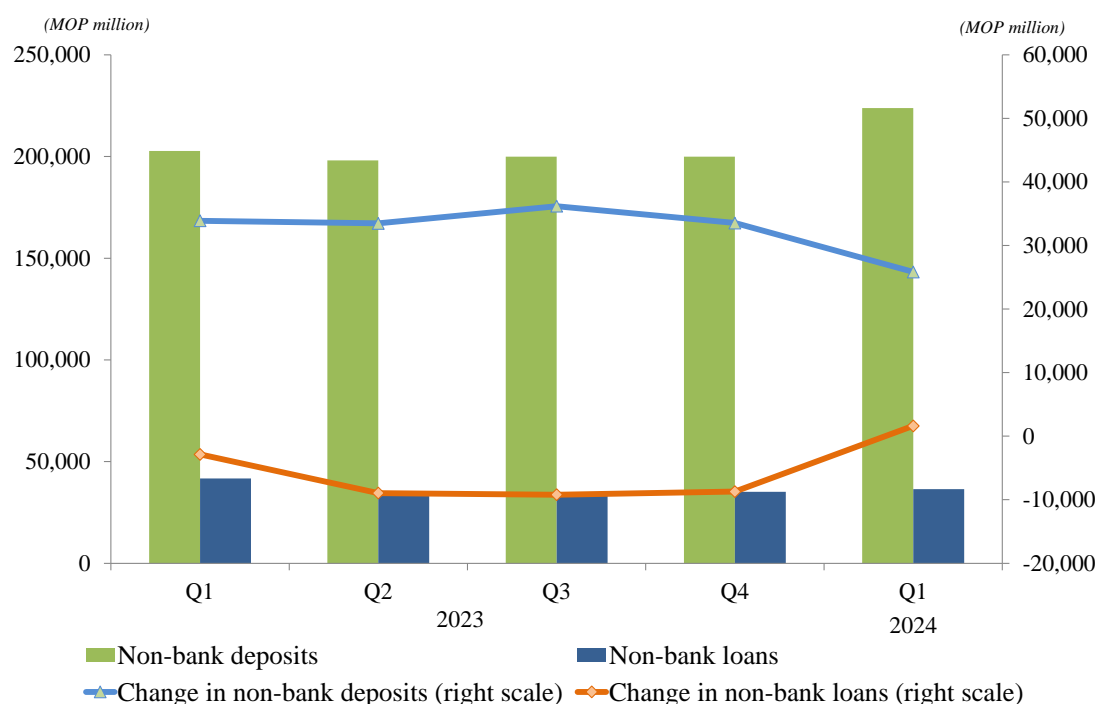
		Net Foreign Assets				
		Total	Portfolio investment	Loans, currency and deposits	Interbank balances	Others
2023	Q1	-1,473.1	12,053.3	54,204.8	-70,127.9	2,396.7
	Q2	-10,436.8	27,001.3	6,776.6	-41,428.1	-2,786.7
	Q3	2,075.7	39,431.5	-85,270.0	49,146.7	-1,232.5
	Q4	-11,017.6	52,965.4	-89,309.1	26,128.1	-802.0
2024	Q1	16,638.6	38,420.1	-13,559.4	-7,951.1	-271.0
	Q2	49,806.7	57,044.2	-24,988.9	26,937.6	-9,186.2

Notes:

- 1. All are net values and are calculated as changes from the end of the preceding year in banks' balance sheets.*
- 2. Outflow is of positive sign while inflow is of negative sign.*
- 3. Loans, currency and deposits, interbank balances and others comprise other investment in the BOP framework.*
- 4. Changes in net foreign assets in the current analysis would not be identical to comparable flows in the BOP (as shown in Table 5). The change in portfolio investment is derived from stock data in banks' balance sheets, which include price and exchange rate effects, when actual portfolio investment flow data from annual BOP statistics are not yet available. In addition, net foreign assets – interbank balances are combined into “loans” and “currency & deposits” in BOP accounting shown in Table 5. “Others” of other investment in the BOP includes banks' other claims on and other liabilities to their foreign direct investors and/or fellow enterprises, which are combined into net foreign assets – interbank balances in banks' balance sheets. Net foreign assets – others therefore include only other claims on and liabilities to unrelated non-bank entities.*

Source: Monetary and Financial Statistics of the AMCM.

As regards Macao's non-bank sectors, the Bank for International Settlements (BIS) provides relatively updated statistics of external deposits and loans. In the first quarter of 2024, deposits of Macao's non-bank sectors with external banks increased by MOP25.8 billion, while their loans from external banks rose by MOP1.6 billion. Hence, there was a net capital outflow of MOP24.2 billion from Macao's non-bank sectors to external banks, compared to a net capital outflow of MOP36.8 billion in the same period of 2023.

Chart 4: Loans and Deposits of Macao Residents with External Banks

Notes:

1. Excluding Macao banks' transactions with external banks or Macao's cross-border interbank transactions.
2. The change in deposits (or loans) for the quarter is the accumulated quarterly changes for the year. For example, the change in Q3 is the summation of changes in Q1, Q2 and Q3.
3. Quarterly changes are adjusted to exclude exchange-rate effects.
4. An increase in deposits with external banks indicates an outflow of capital while an increase in loans from external banks indicates an inflow of capital.

Source: Underlying data from the BIS.

Cross-border capital flows in Macao are affected by non-residents' investment in the local real-estate market, which is one of the components of inward direct investment. As shown in Table 7, the net amount of Macao properties disposed by non-residents totalled MOP0.1 billion in the first half of 2024, compared to a disposal of MOP0.8 billion in the same period of 2023. For residential properties alone, non-residents' purchases from Macao residents marked MOP0.5 billion whereas their sales to Macao residents recorded a larger amount of MOP0.8 billion in the first half of 2024. As a result, the local real-estate market persisted to witness an outflow of external funds.

Table 7: Sales and Purchases of Macao Properties by Non-residents

(MOP million)

		Purchases		Sales	
		Total	Of which: residential properties	Total	Of which: residential properties
2023	Q1	172.1	123.0	511.9	383.3
	Q2	182.7	88.6	642.2	519.1
	Q3	104.4	70.9	1,169.3	1,039.2
	Q4	176.6	74.2	352.0	155.5
2024	Q1	184.9	101.3	506.2	379.2
	Q2	844.8	393.4	660.0	466.6

Note: Excluding transactions between non-residents.

Source: DSEC.

Official foreign exchange reserve assets held by the AMCM rose by MOP8.7 billion from end-2023 to end-June 2024.² According to preliminary estimations, foreign assets held by the SAR Government in the provisional account of the AMCM and the Fiscal Reserve rose by MOP13.6 billion in six months to MOP510.9 billion at end-June 2024.

3. Conclusion

The highly open economy of Macao has a competitive, export-oriented tourism services sector. In 2023, the current account surplus in Macao's BOP, which was underpinned by the notable growth in export of travel services, was balanced by the capital outflows in the financial account, while the official reserve assets recorded the net change in Macao's foreign exchange reserves held by the AMCM.³

² Before adjustment for price and exchange rate changes.

³ A complete BOP also includes a small "capital" account, other than the current and financial accounts, by the International Monetary Fund-advocated BOP statistics compilation method. The "capital" account, which does not capture major capital flows, is only composed of some small values of "gross acquisitions/disposals of non-produced nonfinancial assets" and hence is of little relevance to this report.

During 2023, the trend of capital flows of non-reserve components in the financial account persisted as in 2022 whereas the direction of fund flow of official reserve assets witnessed a reversal. Direct investment, financial derivatives and other investment maintained net inflows whereas portfolio investment continued to record a net outflow of funds. Hence, the preliminary financial account reversed from a net inflow to a net outflow of MOP94.6 billion, mainly due to the increased net outflow of portfolio investment. Official foreign exchange reserves rose by MOP4.4 billion, as against a decrease of MOP8.1 billion in 2022.

In the first half-year of 2024, the increased MOP liquidity of the banking sector indicated a relatively strong demand for the domestic currency or a relatively weak demand for external currencies. Meanwhile, an increase of MOP49.8 billion in net foreign assets of Macao banks, which was mainly attributable to the growth in net portfolio investment, represented a net capital outflow in the local banking sector. In the same period of 2023, Macao banks recorded a net capital inflow of MOP10.4 billion.

Concurrently, as shown by the international banking statistics compiled by the BIS, deposits with external banks held by Macao's non-bank sectors rose in the first quarter of 2024, extending the expansion recorded in 2023. On the other hand, loans granted by external banks to Macao's non-bank sectors dropped in 2023 but rebounded in the first three months of 2024. As external deposits grew faster than external loans, a net capital outflow to external banks from Macao's non-bank sectors was recorded in the first quarter of 2024. Meanwhile, net outflows of inward direct investment from the local real-estate market persisted. In addition, General Government of the non-bank sector registered an expansion in its foreign assets (that is, a net capital outflow) as the Fiscal Reserve increased its external placement.

Alongside the persistent growth in visitor arrivals, the trade-account surplus in the first half of 2024 amounted to MOP97.7 billion, equivalent to 47.8% of Gross Domestic Product (GDP), compared to MOP70.5 billion or 40.6% of GDP in the same period last year. Moreover, net foreign assets of the banking sector increased in

the first two quarters of 2024, reversing the net capital inflows recorded in 2023. On the other hand, net capital outflows were recorded in non-bank sectors as well as official exchange reserve assets held by the AMCM.

Macao experienced solid economic recovery in the period under review while its trade or current account recorded a surplus. In view of the sufficient positions of net foreign assets held by Macao's private and public sectors, the SAR will remain as a net capital exporter to the rest of the world. Nevertheless, individual economic sectors have demonstrated a reversal of cross-border capital flows or large variations in external assets as shown by relevant statistics. Hence, maintaining close surveillance and enhanced prudence in risk management would be indispensable to prevent unexpected influences to the economy.

Annex: Glossary

Balance of payments

According to the IMF's *Balance of Payments and International Investment Position Manual, Sixth Edition (BPM6)*, the BOP is a statistical statement that summarises transactions between residents and non-residents during a period. It consists of the goods and services (trade) account, the primary income account, the secondary income account, the capital account and the financial account.

Cross-border capital flow

Cross-border capital flow involves the movement of assets across the border for the purpose of investment, trade or business production. This type of capital flows arises when ownership of assets are transferred from one economy to another economy. The assets involved are very often equities, debt instruments, loans, currency and deposits, and real estate. These transactions are recorded in the financial account in the BOP.

Financial account of the balance of payments

The financial account records transactions of financial assets and liabilities which take place between residents and non-residents. The overall balance on the financial account is called net lending/net borrowing in *BPM6*. Net lending means that, in net terms, funds are supplied to the rest of the world and net borrowing means the opposite. The financial account consists of direct investment, portfolio investment, financial derivatives, other investment and official reserve assets.

Foreign direct investment in the financial account

Foreign direct investment is a cross-border investment of which a resident in one economy has control or a significant degree of influence on the management of an enterprise that is resident in another economy.

Portfolio investment in the financial account

Portfolio investment refers to cross-border transactions and positions involving debt or equity securities, other than those included in direct investment.

Financial derivatives in the financial account

Financial derivatives are non-debt/equity financial instruments whose value is derived upon one or more underlying assets, and through which specific financial risks such as interest rate risk, foreign exchange risk, equity and commodity price risks can be traded in their own right in financial markets. Most common types of financial derivatives are futures contracts, forward contracts, options and swaps.

Other investment in the financial account

Other investment is a residual category that includes positions and transactions other than those included in direct investment, portfolio investment, financial derivatives and employee stock options. It includes: (i) other equity; (ii) currency, loans and deposits; (iii) non-life insurance technical reserves, life insurance and annuities entitlements; (iv) trade credit and advances; and (v) other accounts receivable/payable.

Official reserve assets

Official reserve assets, or international reserves, are external assets readily available in the most unconditional form to and controlled by monetary authorities for meeting BOP financing needs, for intervention in exchange markets to affect the currency exchange rate, and for other related purposes.

Liquidity

Liquidity refers to financial asset, usually traded in the money market that can be easily converted to money at low transaction cost with little or no loss in value. Primary liquidity in Macao consists of monetary base and MOP-denominated monetary bills issued by the AMCM.

Monetary base

The monetary base, or high-powered money, is the sum of total currency (legal tender banknotes plus coins) issues and commercial banks' deposits with the AMCM.