



HONG KONG MONETARY AUTHORITY
香港金融管理局

Briefing to the Legislative Council Panel on Financial Affairs

8 May 2023

Discussion Topics



Updates on

- Financial and Economic Environment
- Currency Stability
- Banking Stability
- Financial Infrastructure
- Hong Kong as an International Financial Centre
- Investment Environment and Performance of the Exchange Fund
- The Hong Kong Mortgage Corporation Limited



Financial and Economic Environment

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Global economic growth forecasts

Real GDP Growth

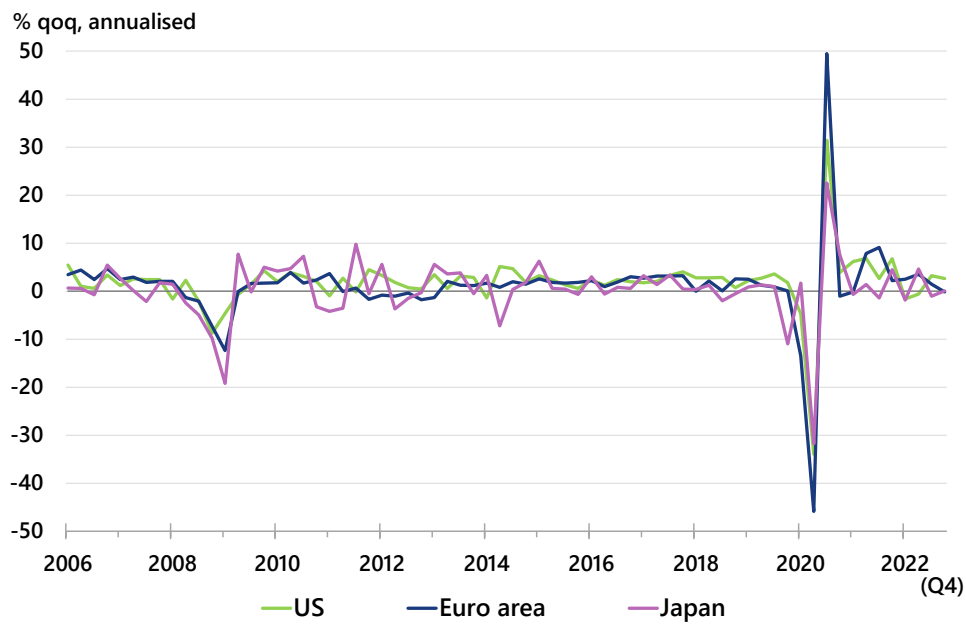
(% year-on-year)

	2022	2023 Forecasts	2024 Forecasts
US	2.1	1.1	0.7
Euro area	3.5	0.7	1.0
Japan	1.0	1.1	1.1
Asia (ex-Japan)	3.7	4.8	4.8
Mainland China	3.0	5.5	5.1
Hong Kong	-3.5	3.9	3.6

Source: April 2023 Consensus Forecasts

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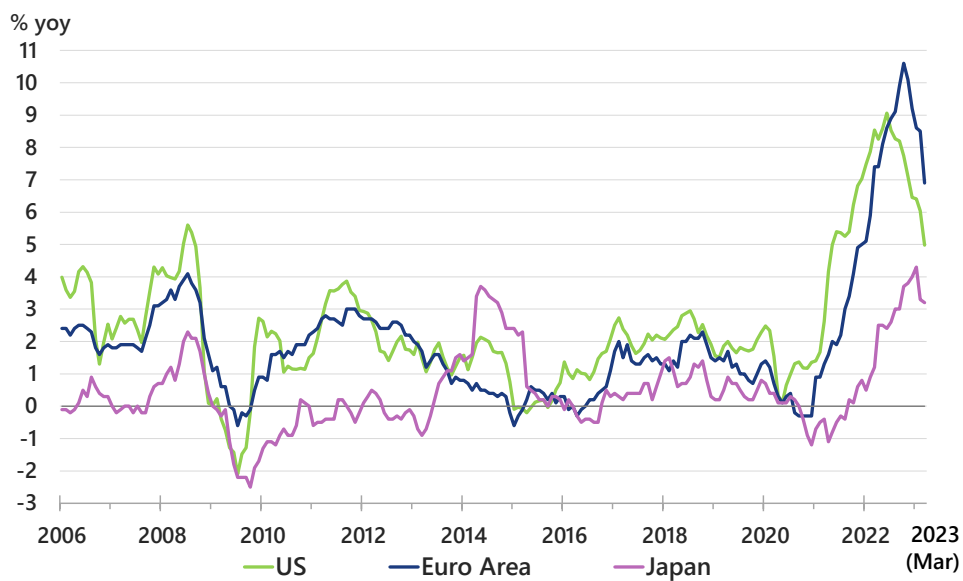
Real GDP growth in major economies



Source: CEIC

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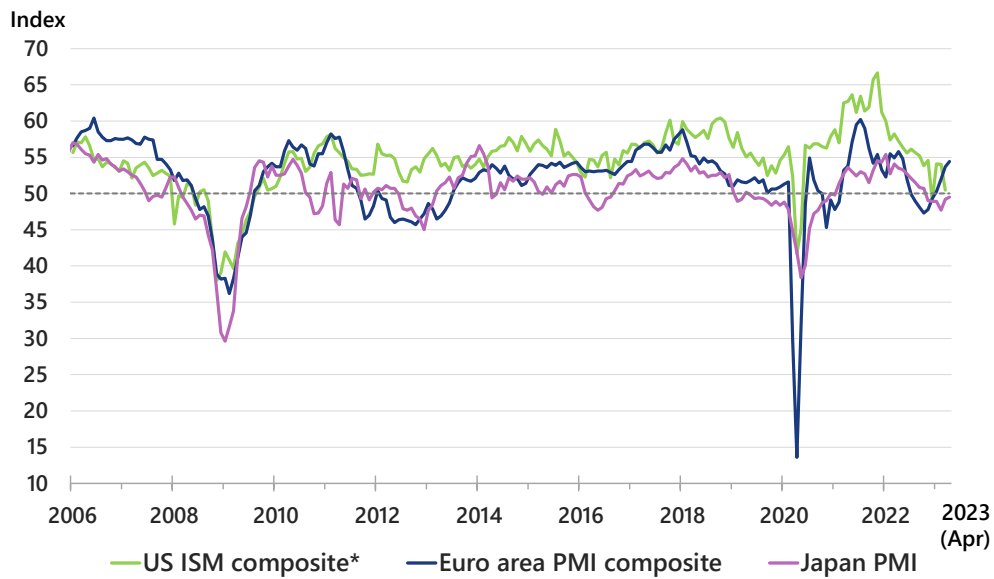
Headline inflation in major economies



Source: CEIC

6

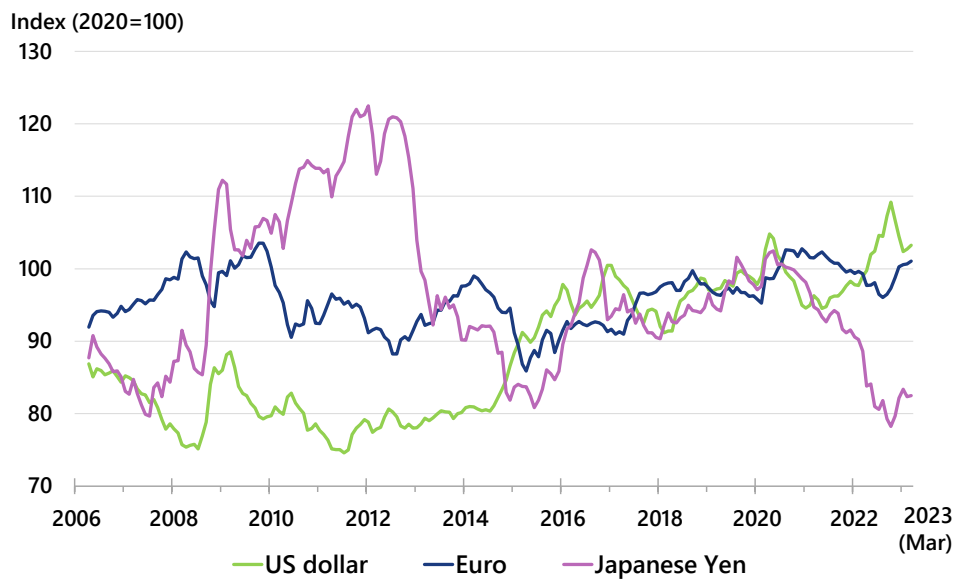
Purchasing Managers' Index in major economies



* Weighted average of the ISM Manufacturing and Services PMIs
Source: CEIC

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Nominal effective exchange rate index of major currencies



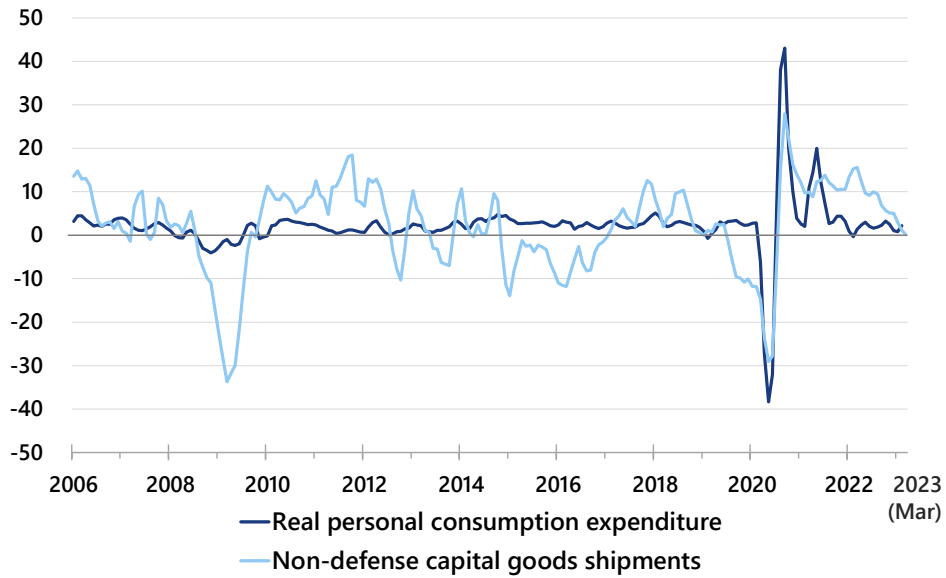
Source: CEIC

8

US: Consumption growth and business investment activity



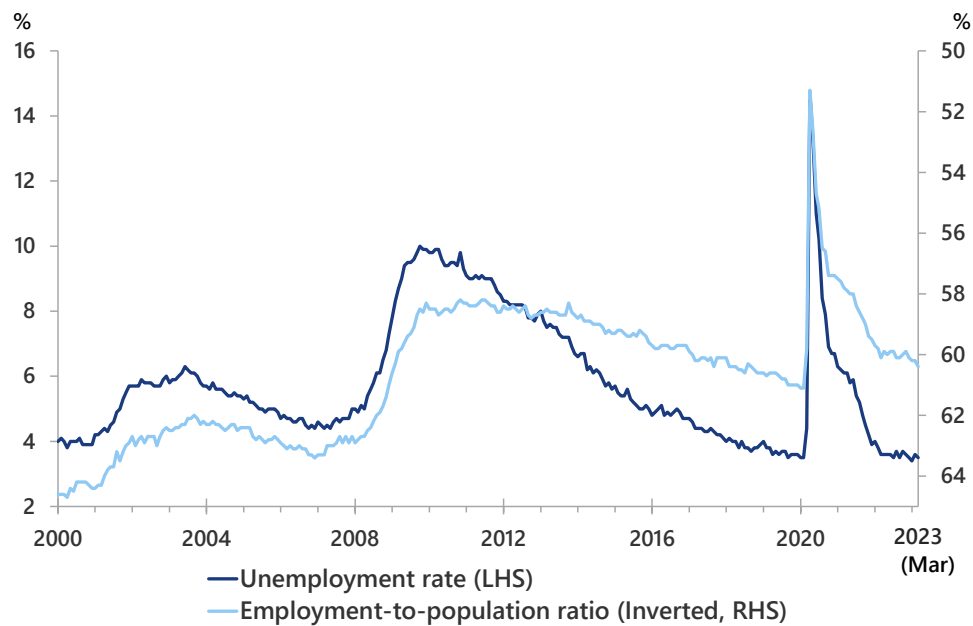
% 3m-on-3m, annualised



Source: CEIC

9

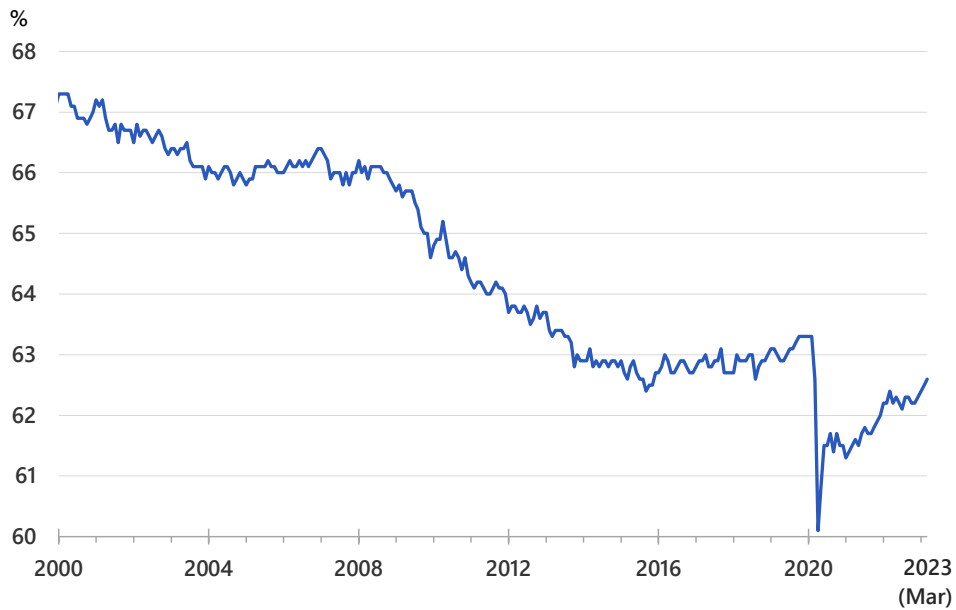
US: Labour market situation



Source: CEIC

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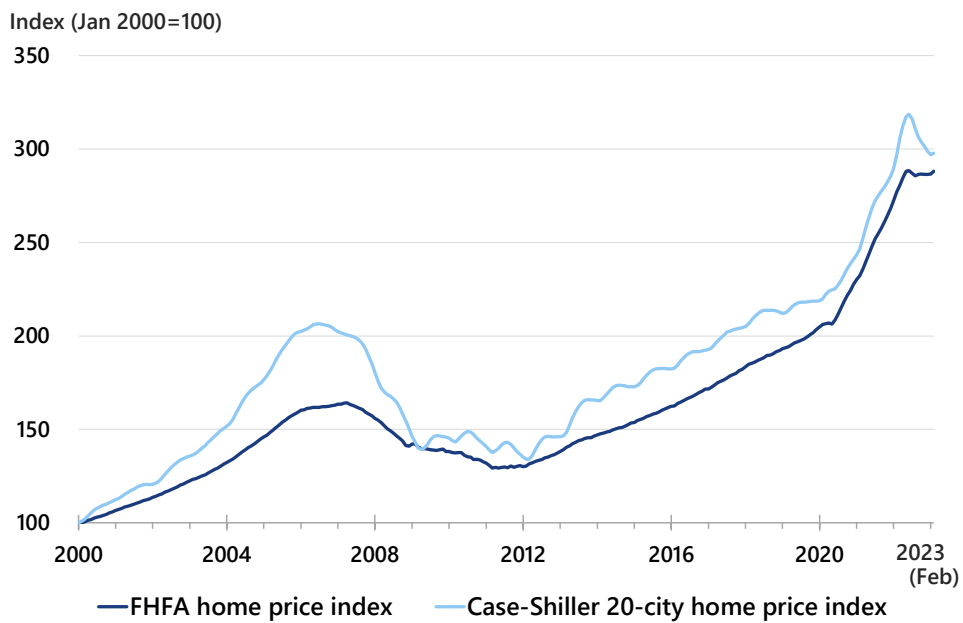
US: Labour force participation rate



Source: CEIC

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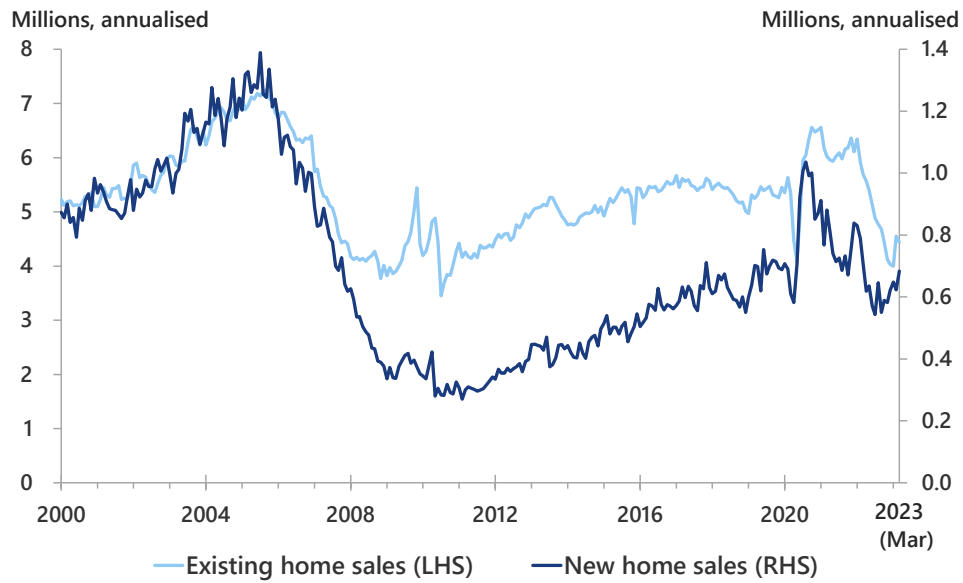
US: Home prices



Sources: CEIC and Datastream

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US: Home sales



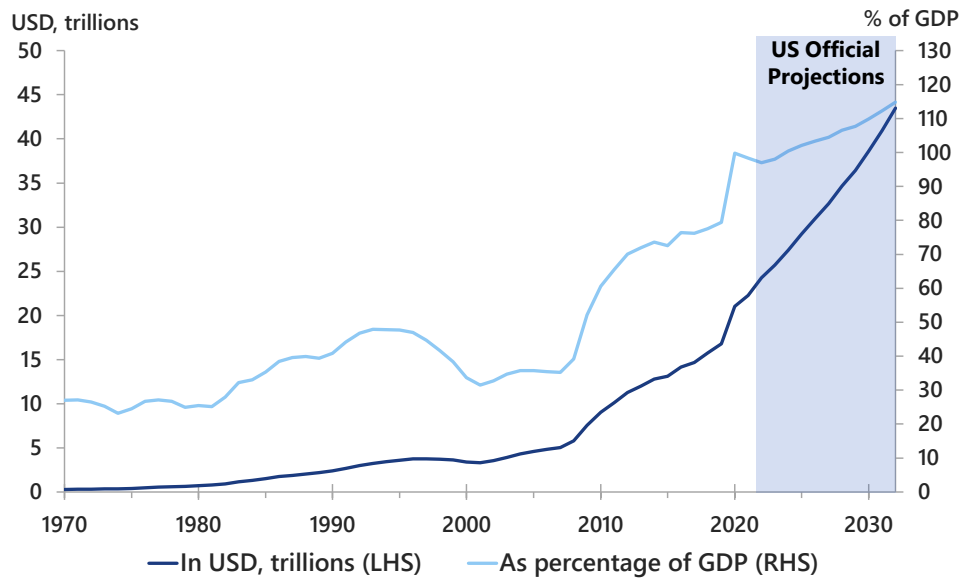
Sources: CEIC and Datastream

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US: Federal government debt



US federal debt held by the public



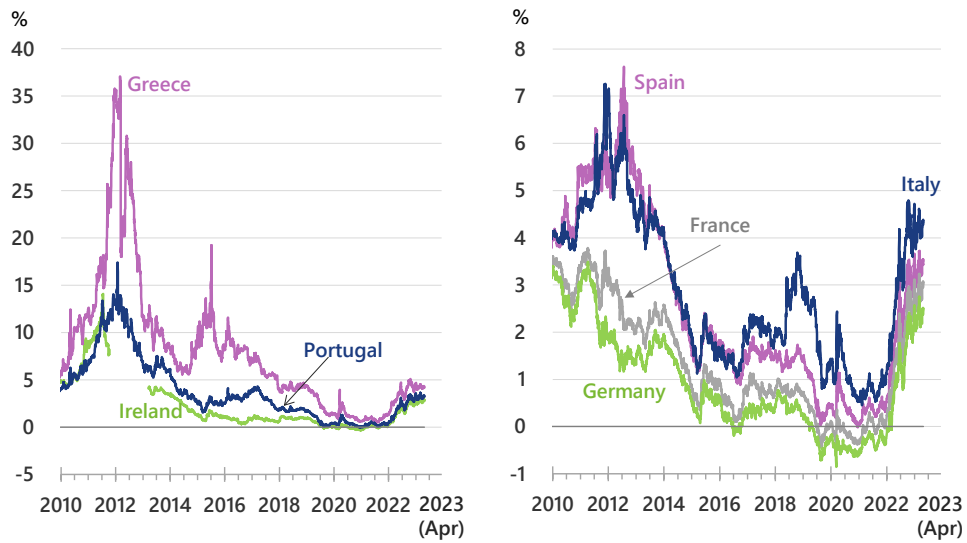
Sources: CEIC and Congressional Budget Office

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Euro area: Sovereign bond yields



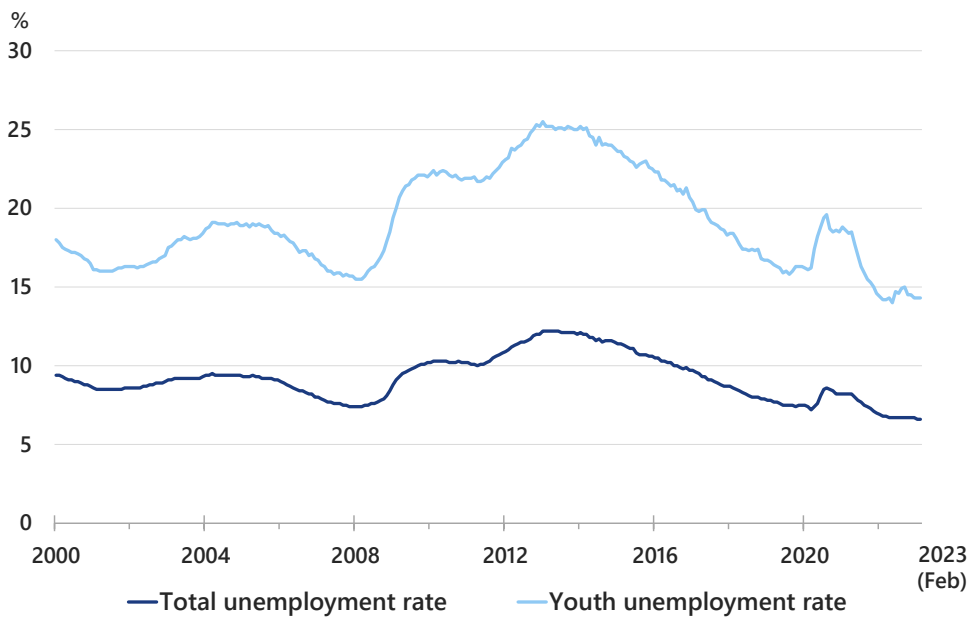
10-year sovereign bond yield



Note: 10-year Irish sovereign bond yield data is not available between 12 October 2011 and 14 March 2013.
Source: Bloomberg

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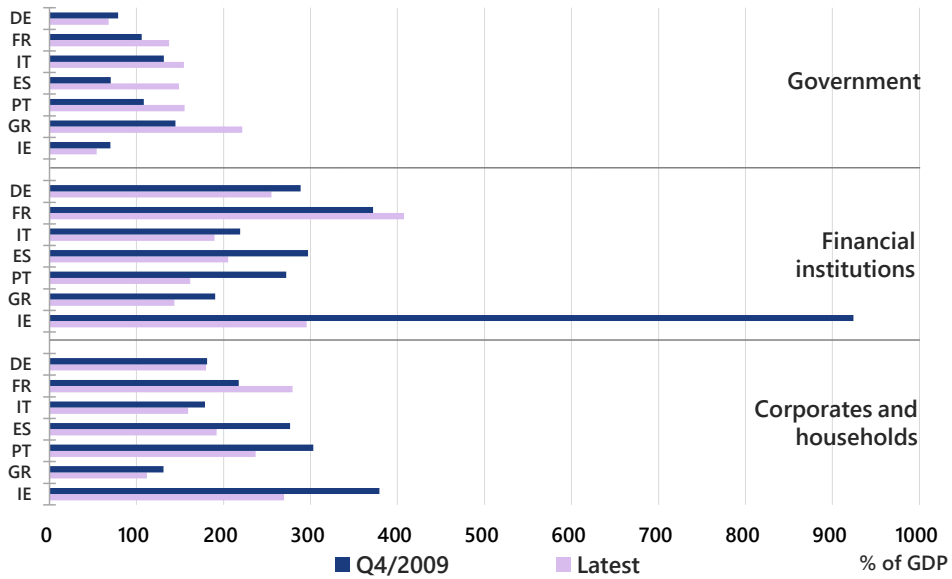
Euro area: Unemployment rate



Source: Bloomberg

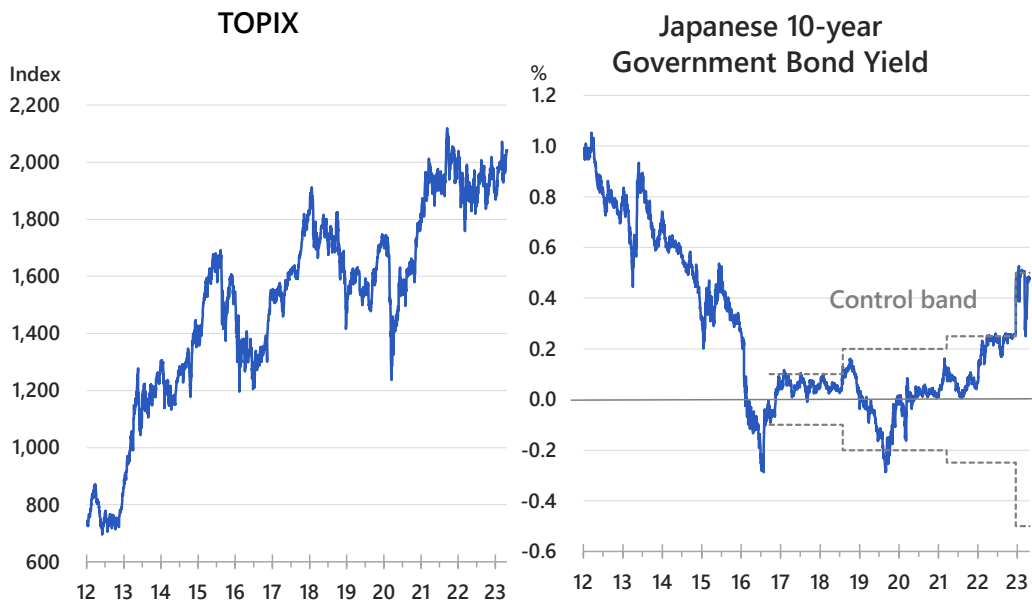
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Euro area: Overall indebtedness



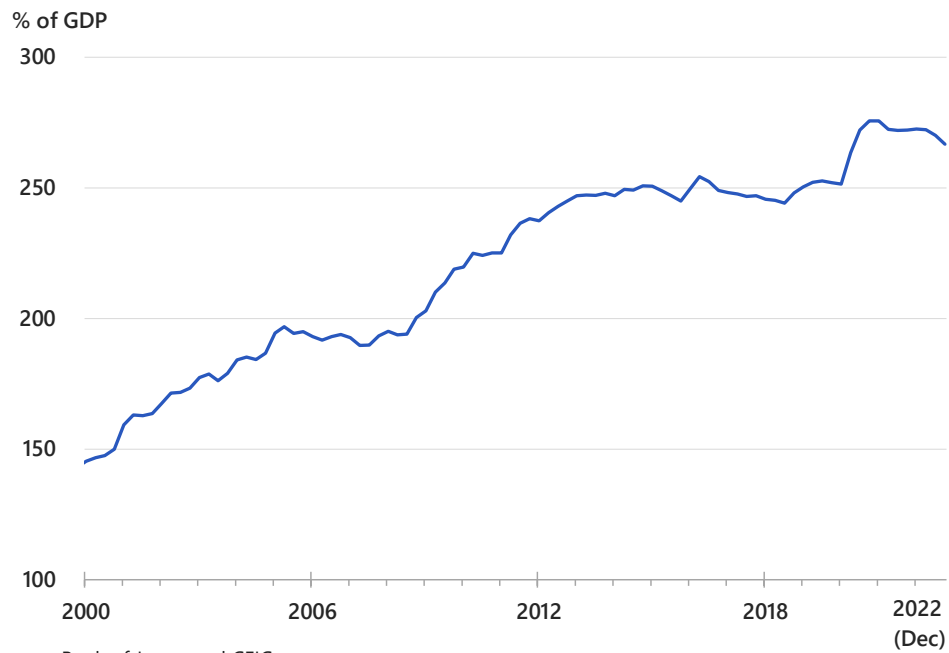
Note: DE – Germany, FR – France, IT – Italy, ES – Spain, PT – Portugal, GR – Greece, IE – Ireland
 The latest figures are up to Q3/2022 for government, whilst the rest are up to Q4/2022.
 Source: European Central Bank

Japan: Financial markets



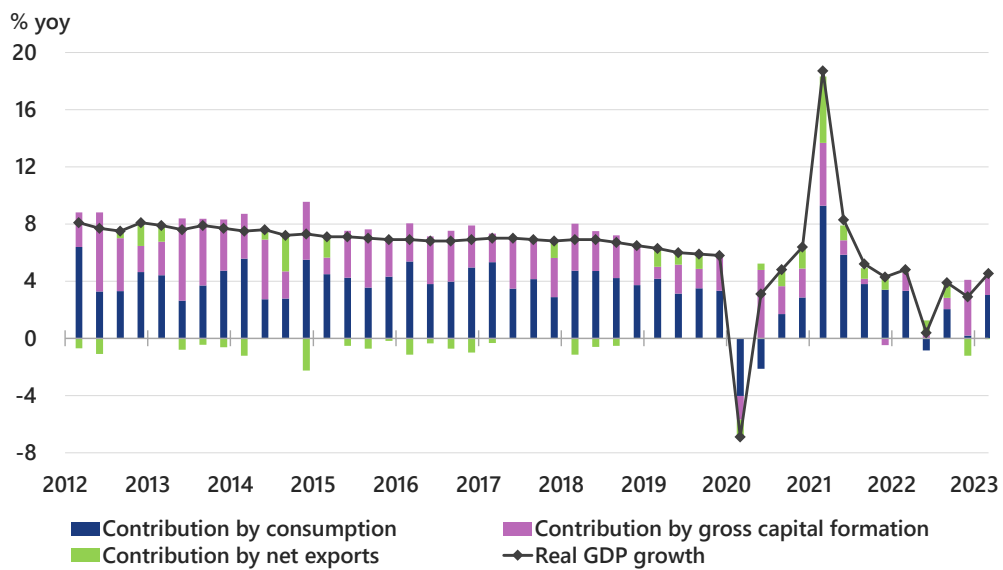
Source: Bloomberg

Japan: Public debt



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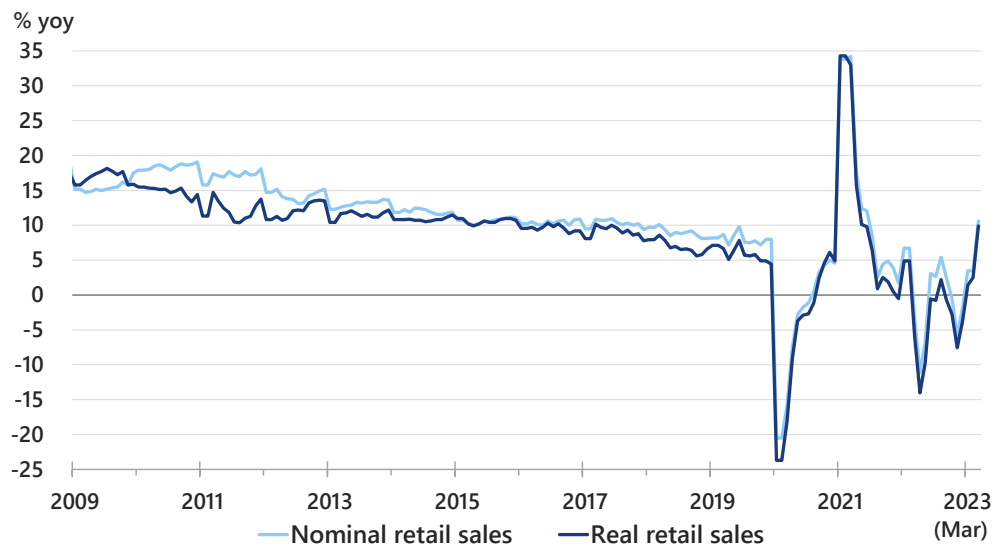
Mainland China: Real GDP growth



Source: CEIC

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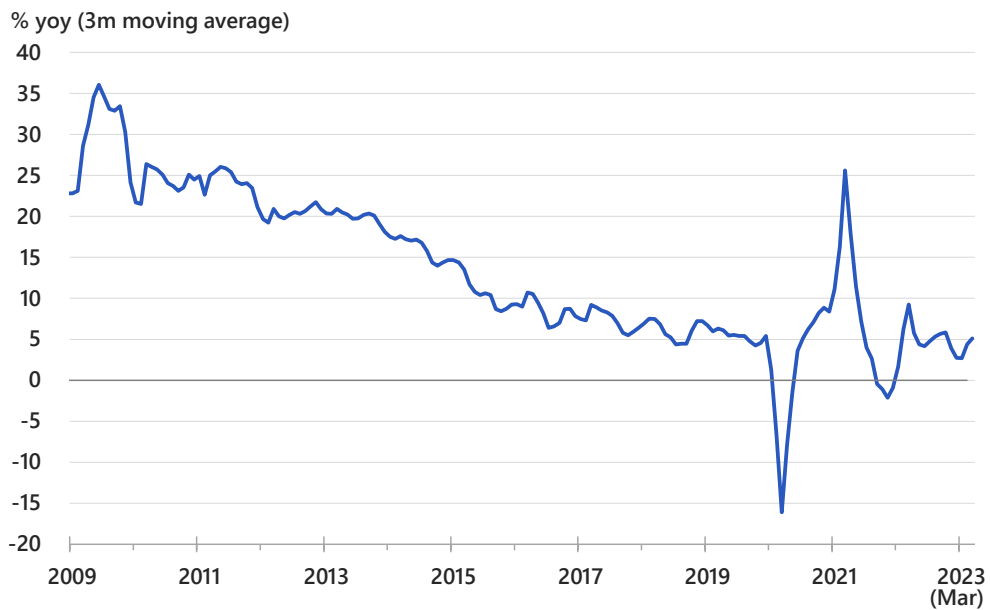
Mainland China: Retail sales



Note: January and February figures are the average annual growth rate for the first two months of the year.
Sources: WIND and HKMA staff estimates

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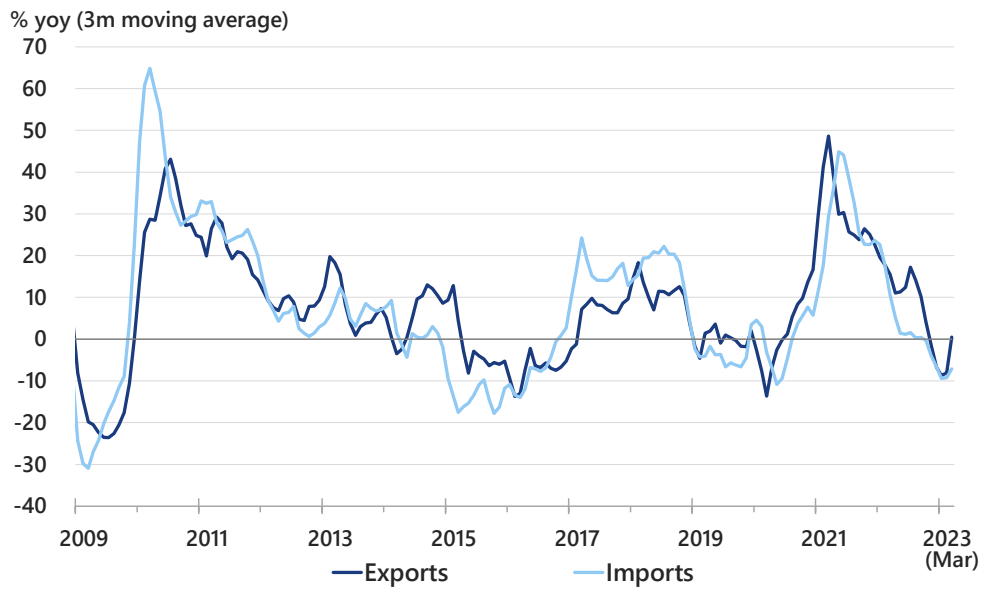
Mainland China: Fixed asset investment



Sources: CEIC and HKMA staff estimates

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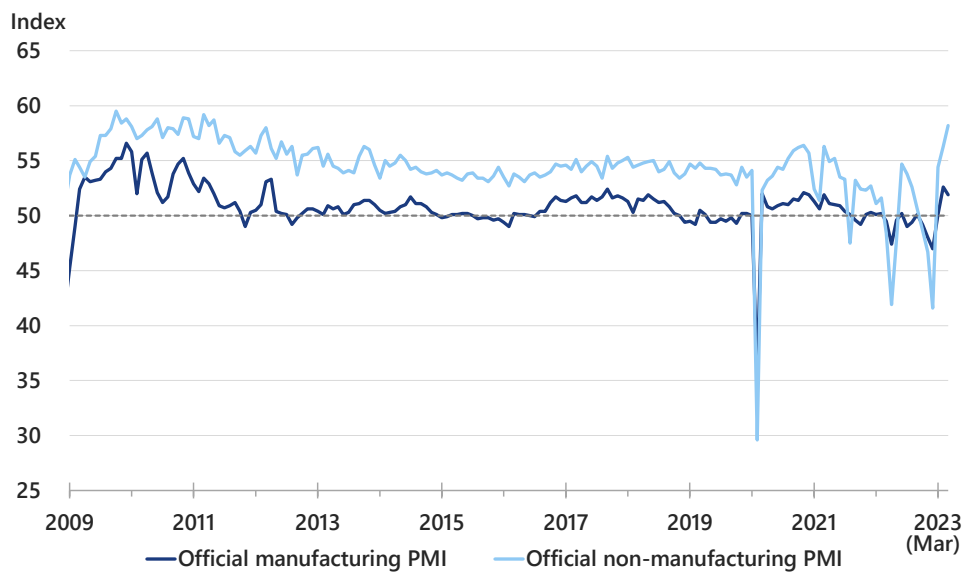
Mainland China: Import and export growth



Sources: CEIC and HKMA staff estimates

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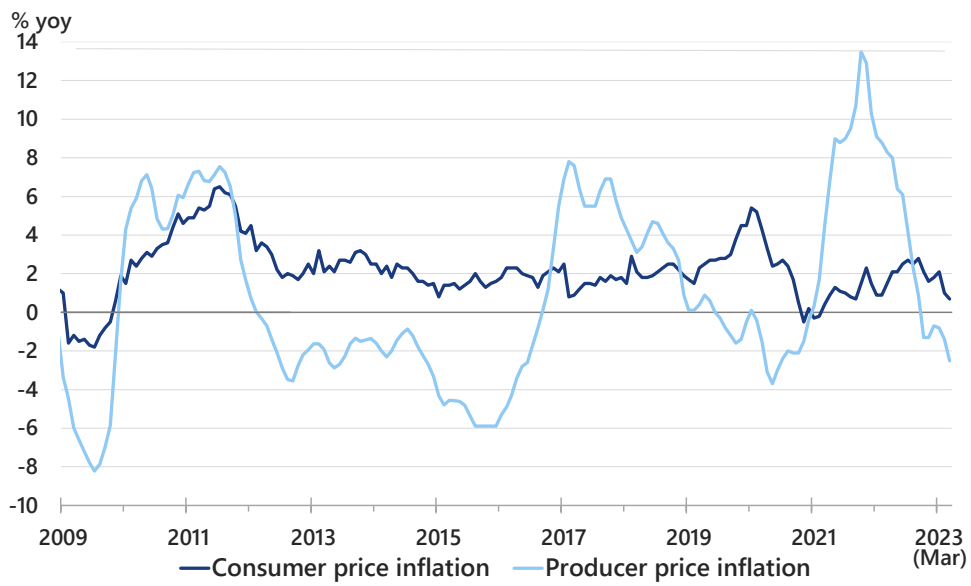
Mainland China: Purchasing Managers' Index



Source: CEIC

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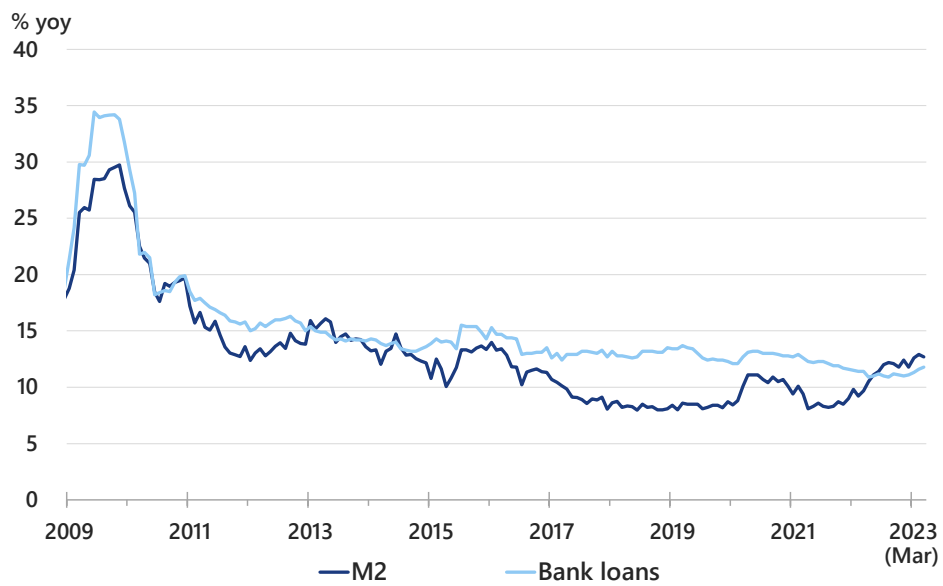
Mainland China: Inflation



Source: CEIC

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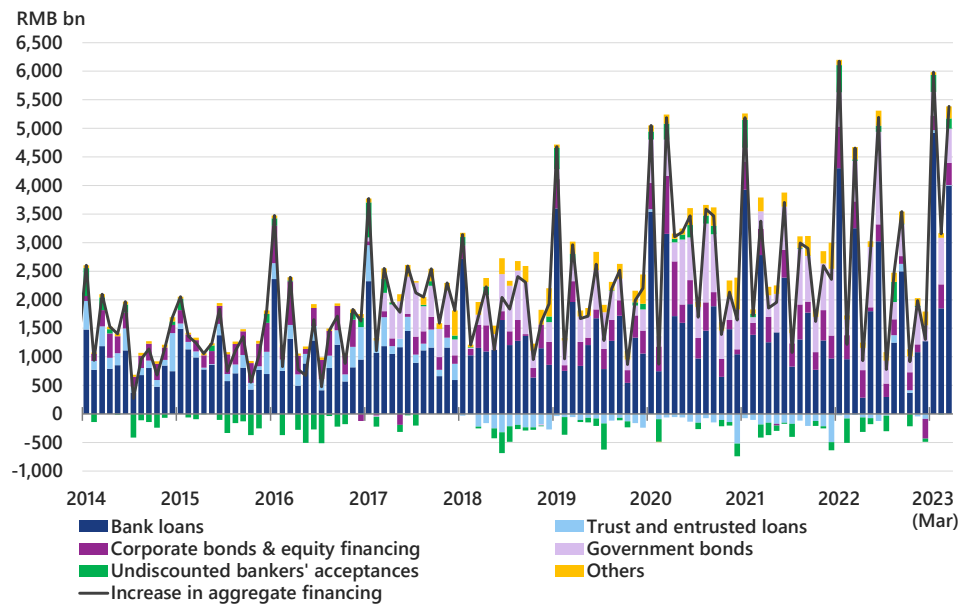
Mainland China: Money and loan growth



Source: CEIC

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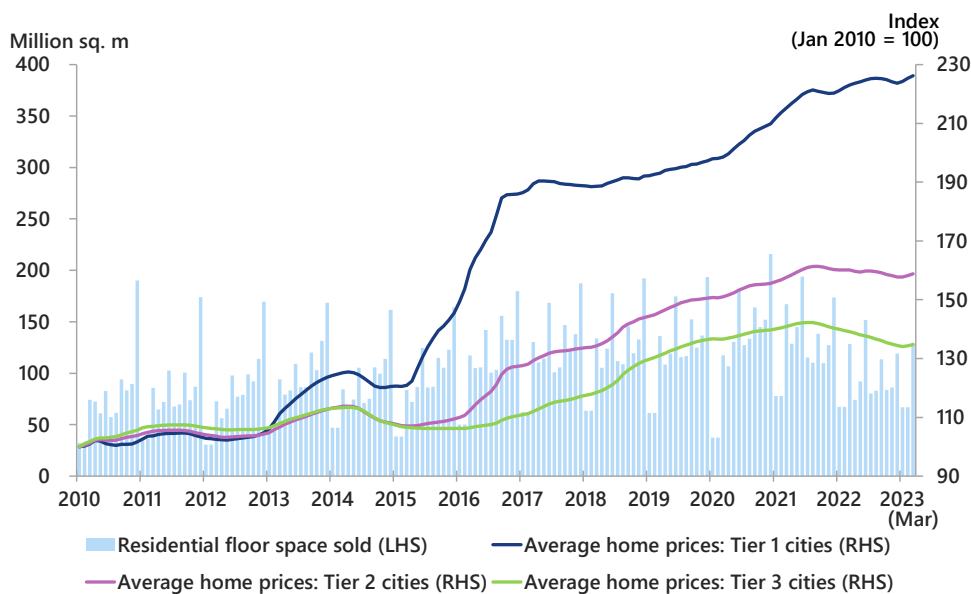
Mainland China: Aggregate financing flow



Note: "Others" primarily include loans written off and asset-backed securities of depository financial institutions.
Sources: CEIC and HKMA staff estimates

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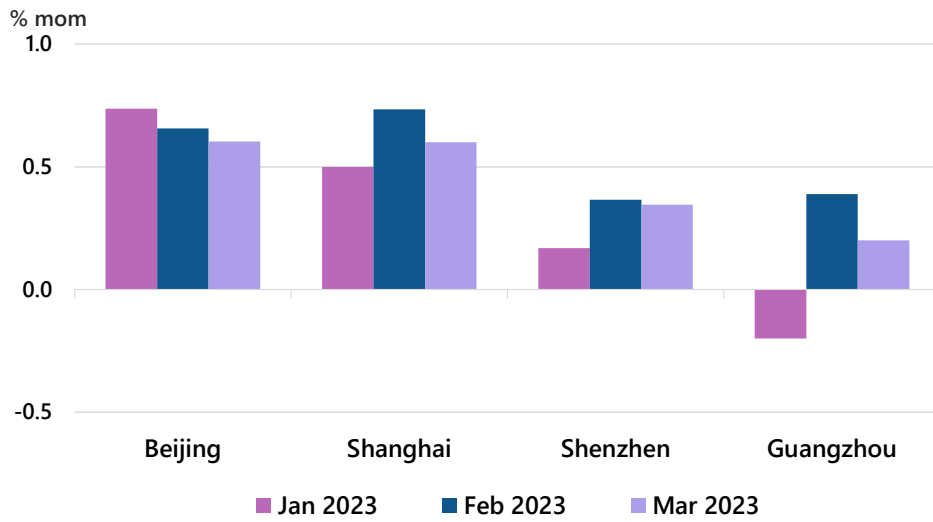
Mainland China: Property price and transaction volume



Sources: CEIC and HKMA staff estimates

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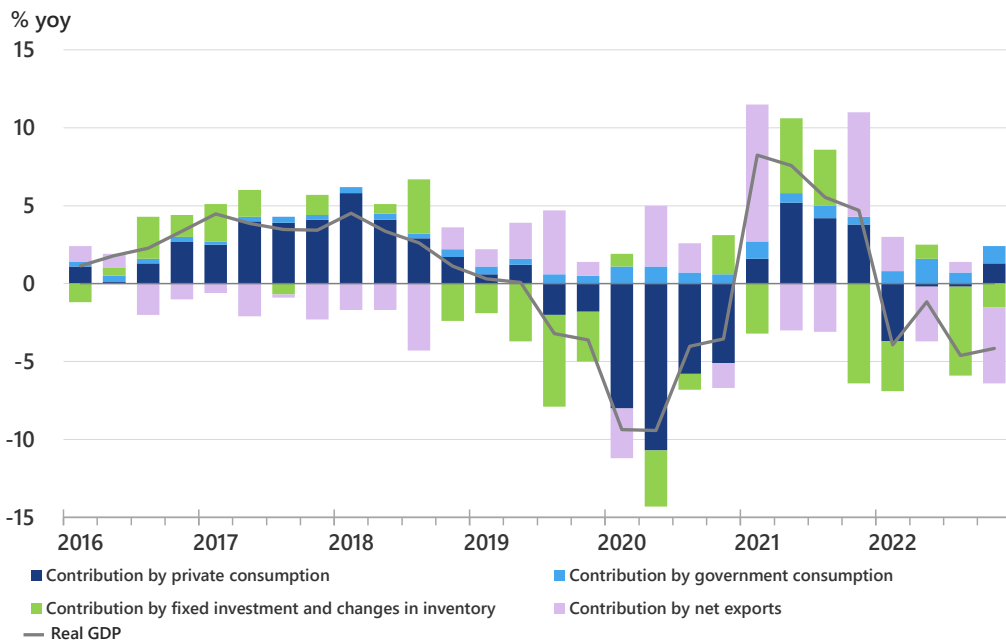
Mainland China: Housing price changes in major cities



Sources: CEIC, WIND and HKMA staff estimates

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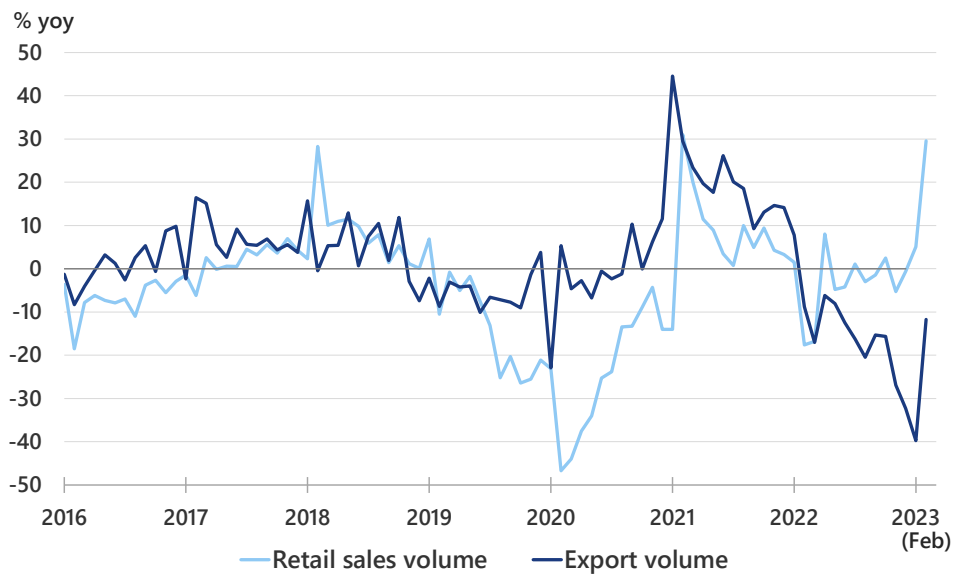
Hong Kong: Real GDP growth



Source: C&SD

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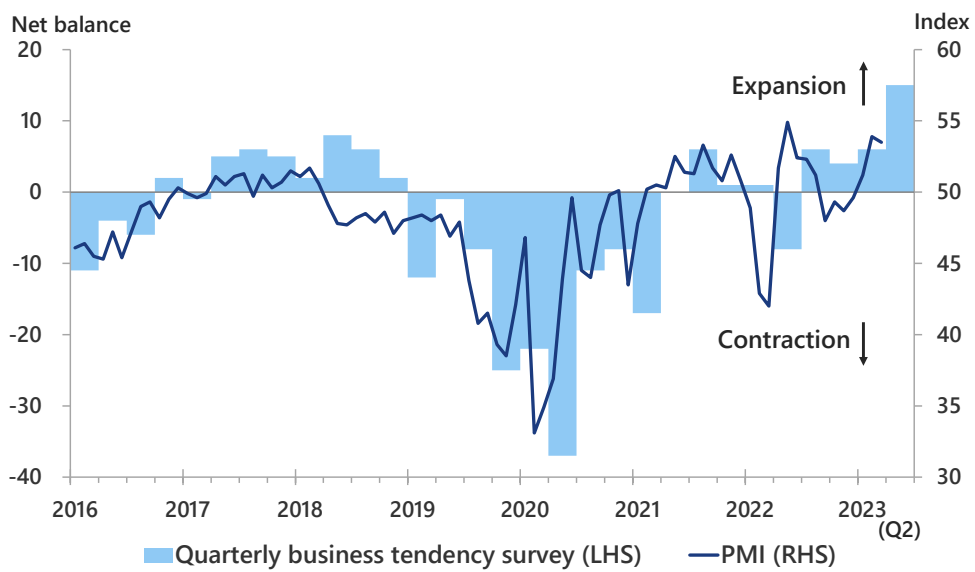
Hong Kong: Economic activity



Source: C&SD

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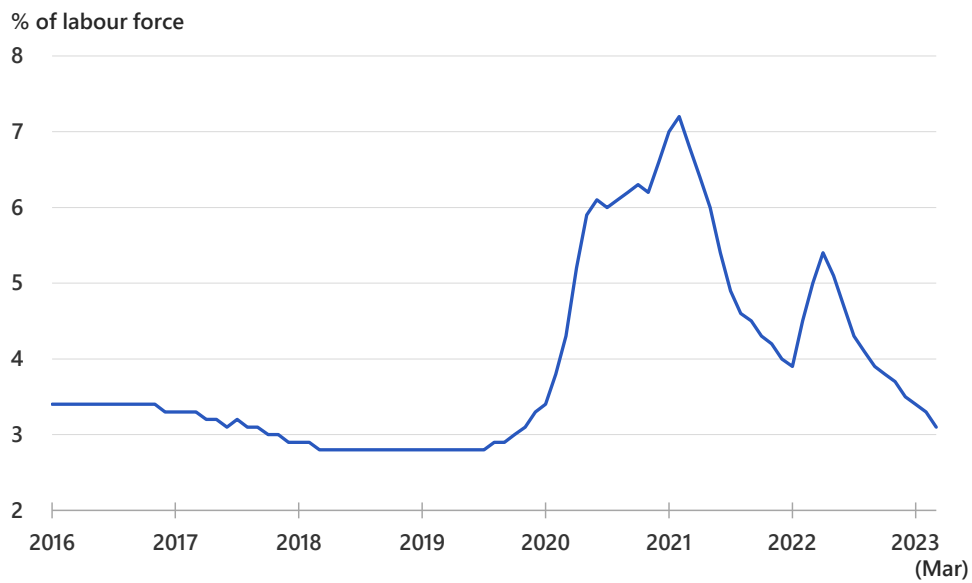
Hong Kong: Business outlook



Sources: C&SD and S&P Global

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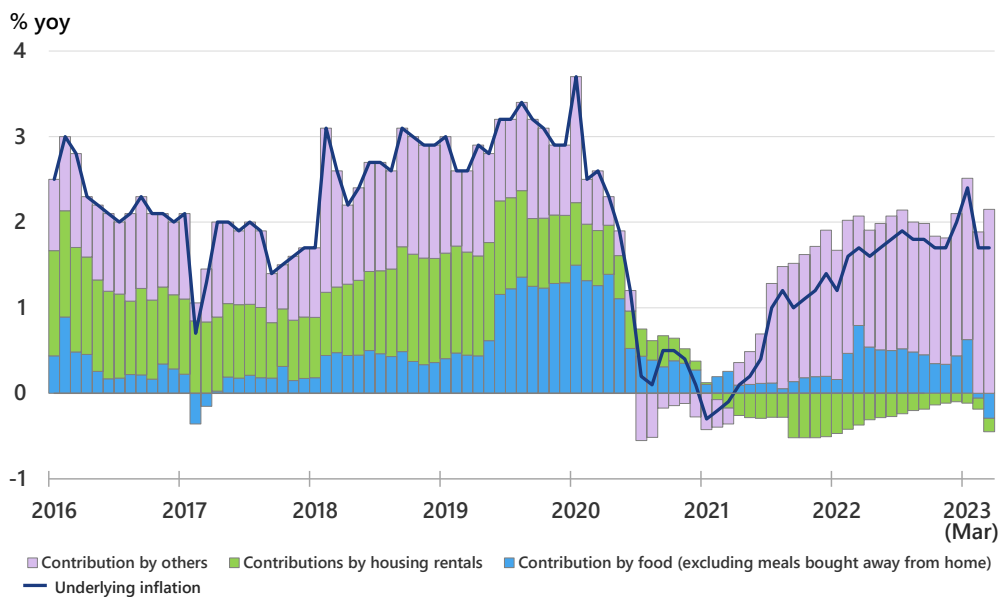
Hong Kong: Unemployment rate



Source: C&SD

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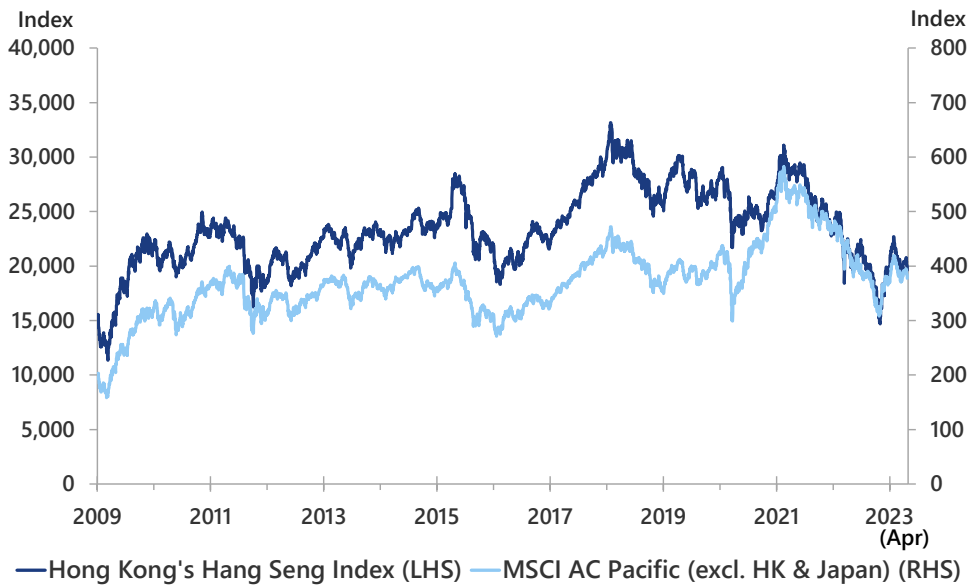
Hong Kong: Inflation



Sources: C&SD and HKMA staff estimates

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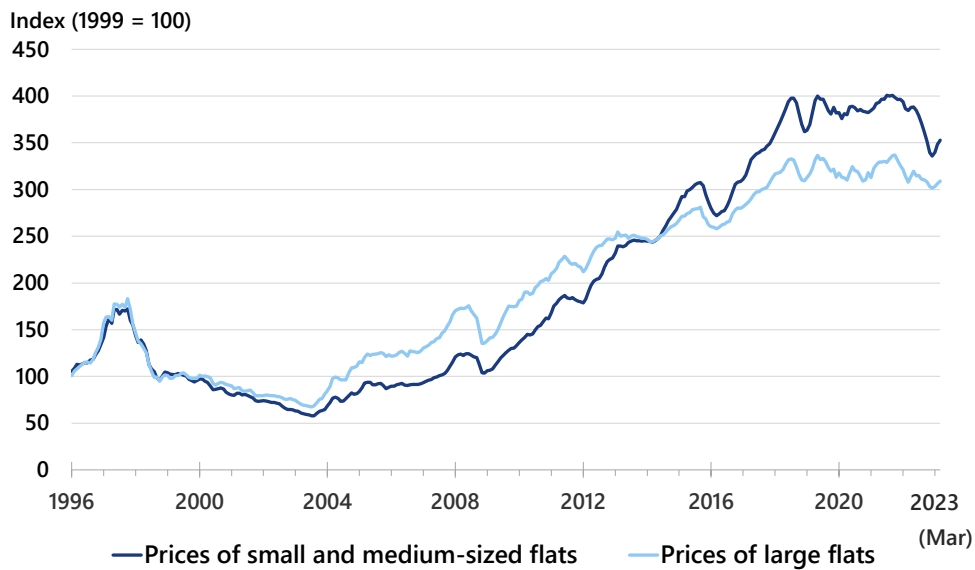
Hong Kong: Equity market



Source: Bloomberg

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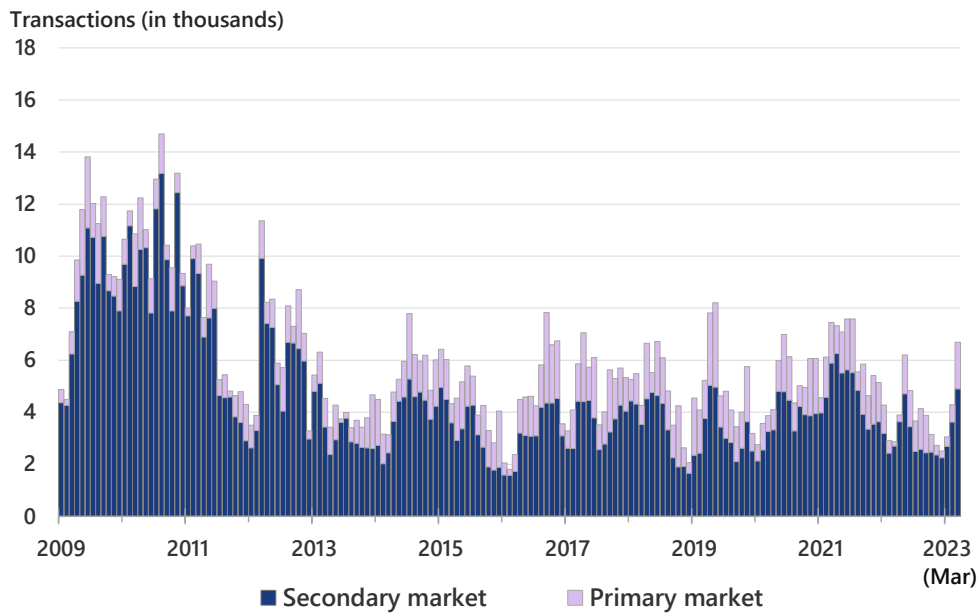
Hong Kong: Residential property prices



Source: Rating and Valuation Department

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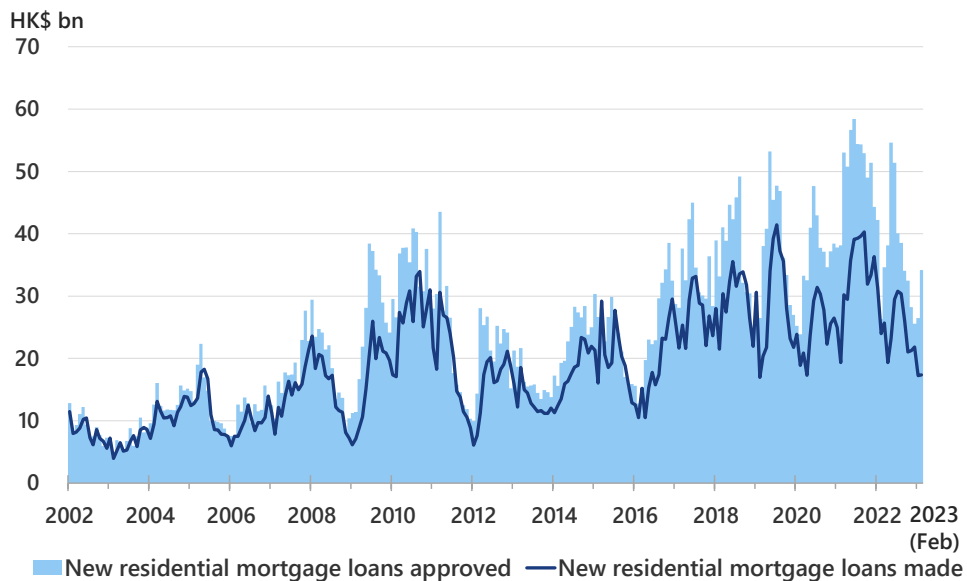
Hong Kong: Transaction volume in the primary and secondary residential property markets



Source: The Land Registry

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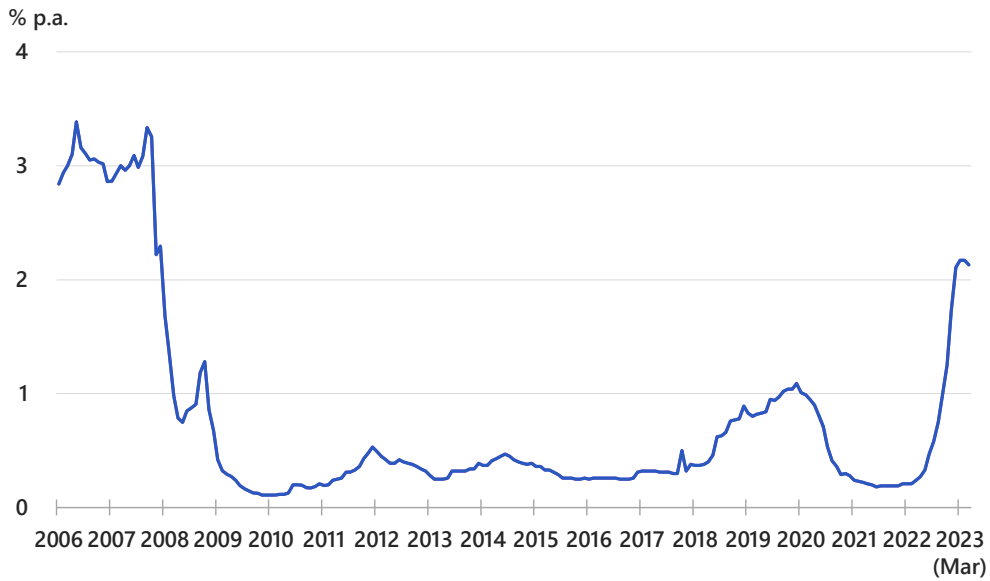
Hong Kong: New residential mortgage loans



Source: HKMA

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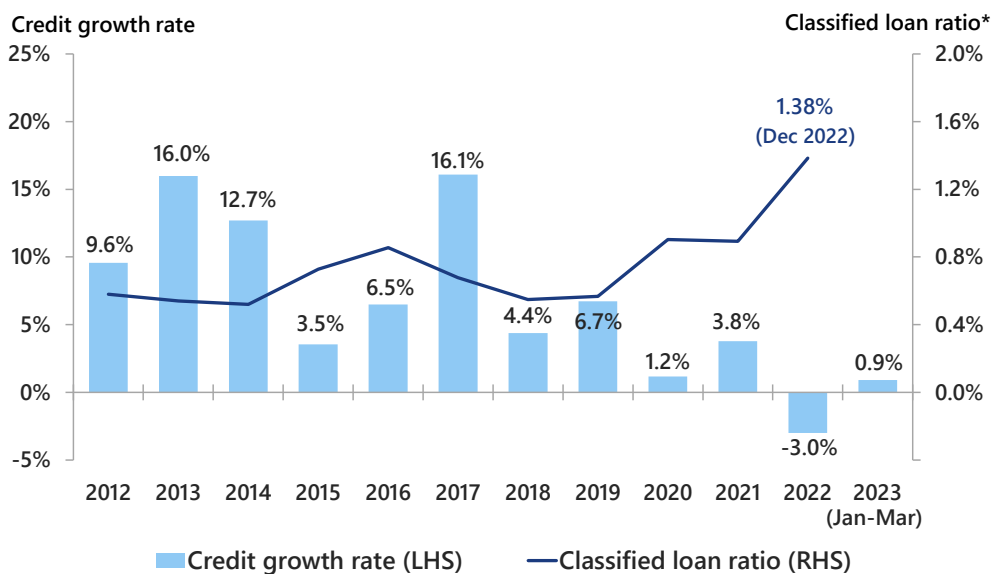
Hong Kong: Composite interest rate



Source: HKMA

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Hong Kong: Loan growth and asset quality



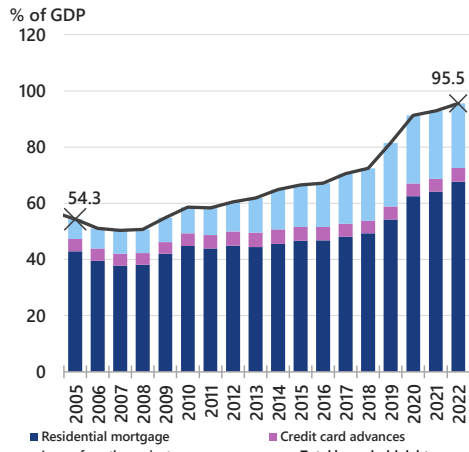
* Classified loan ratio of all authorized institutions
Source: HKMA

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Hong Kong: Household debt

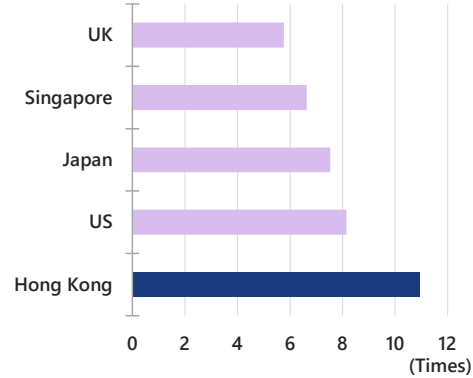


Gross household debt



Note: Around 90% of the household debts are residential mortgage loans, which are governed by the macroprudential policy framework, as well as collateralised loans to wealth management customers against financial assets.
Source: HKMA

Household net worth-to-liabilities ratio



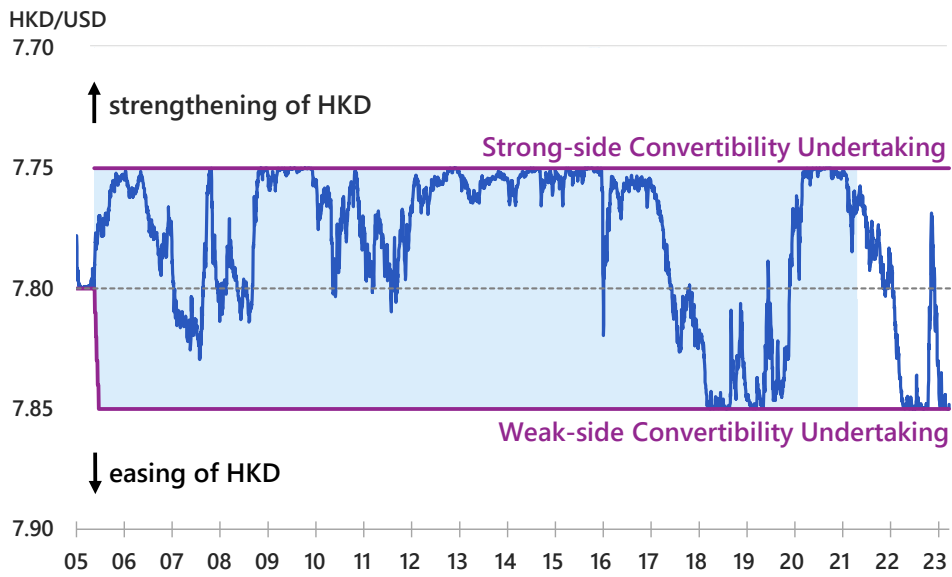
Notes: (1) Household net worth (or net household assets) is the difference between gross household assets and gross household liabilities. (2) Taking Hong Kong as an example, the above number means that Hong Kong household net worth is over 10 times its gross household liabilities. (3) The figure for Japan refers to that at end-2020, while the figures for the other economies (including Hong Kong) refer to those at end-2021.

Sources: HKMA staff estimates and statistical agencies or central banks of selected economies

Currency Stability

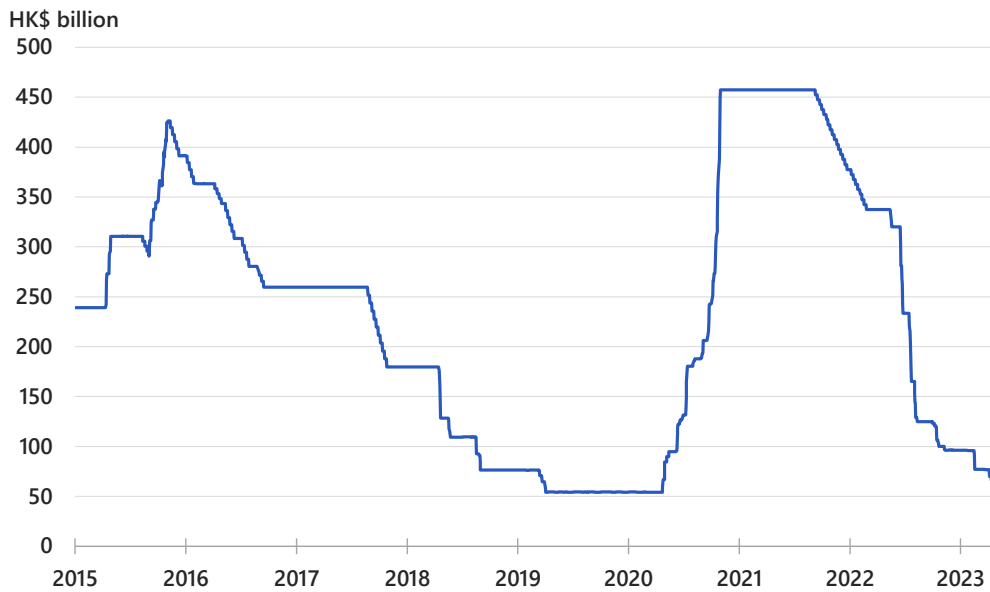


Hong Kong dollar spot exchange rate



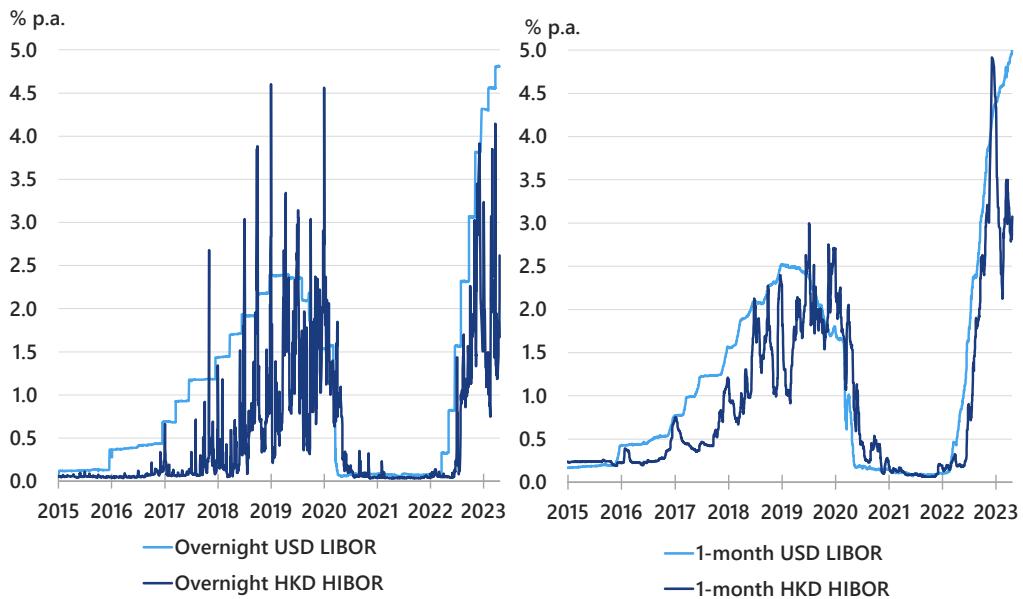
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Aggregate Balance



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Interbank rates



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12-month Hong Kong dollar forward points



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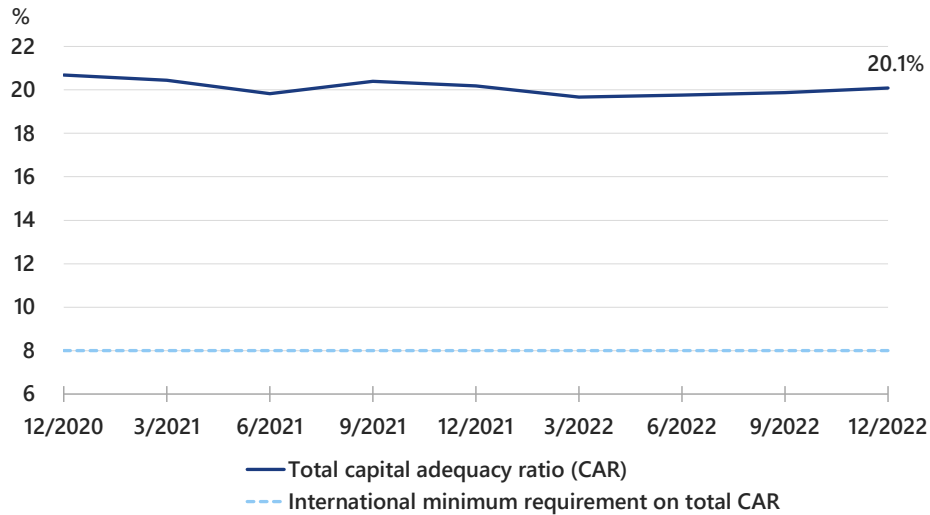


Banking Stability

Banking sector performance



Locally incorporated authorized institutions (AIs) remain well capitalised



Source: HKMA

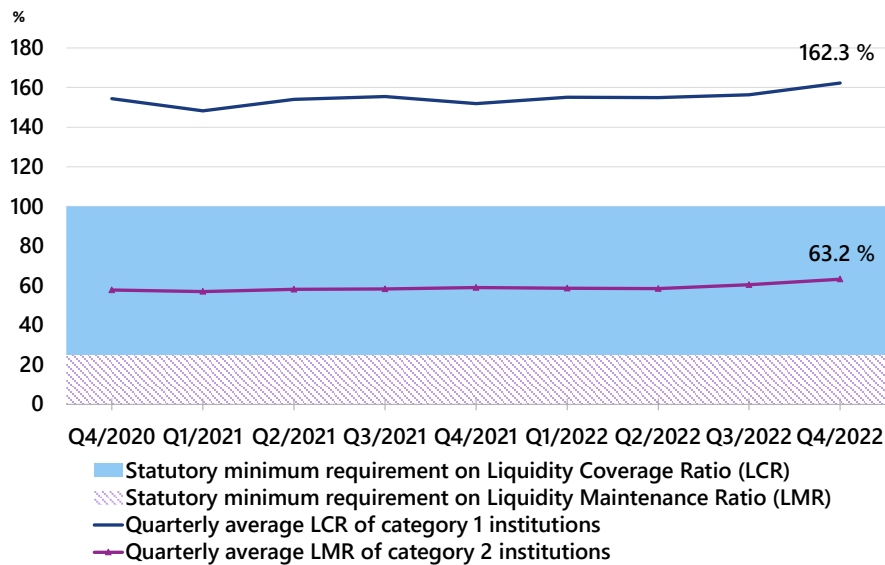
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- The banking sector remains well capitalised. The consolidated total CAR of locally incorporated AIs stood at 20.1% at end-December 2022, well above the international minimum requirement of 8%.

Banking sector performance



Liquidity position remains strong



Source: HKMA

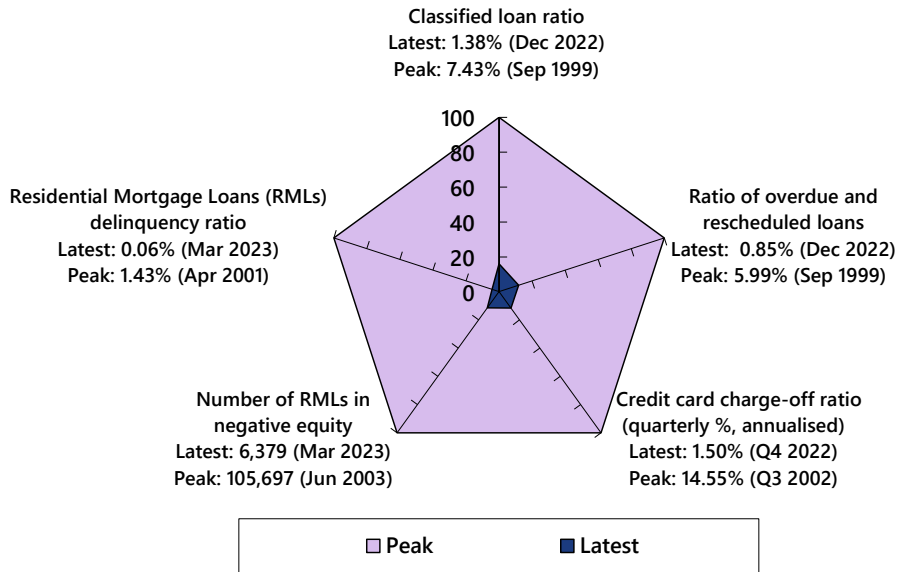
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- In the fourth quarter of 2022, the quarterly average LCR of category 1 institutions was 162.3%, well above the statutory minimum requirement of 100%. For category 2 institutions, their quarterly average LMR was 63.2% during the same period, also well above the statutory minimum requirement of 25%.

Banking sector performance



Asset quality stays healthy



Source: HKMA

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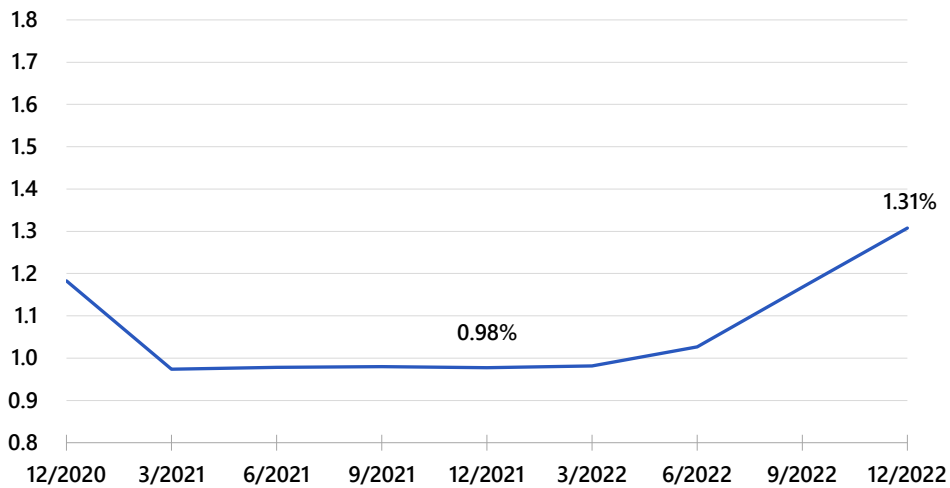
- The classified loan ratio of the banking sector rose to 1.38% at end-December 2022 from 1.19% at end-September 2022. The overall asset quality of banks remains at a healthy level.

Banking sector performance



Net interest margin (NIM) widened

% (year-to-date annualised)



Source: HKMA

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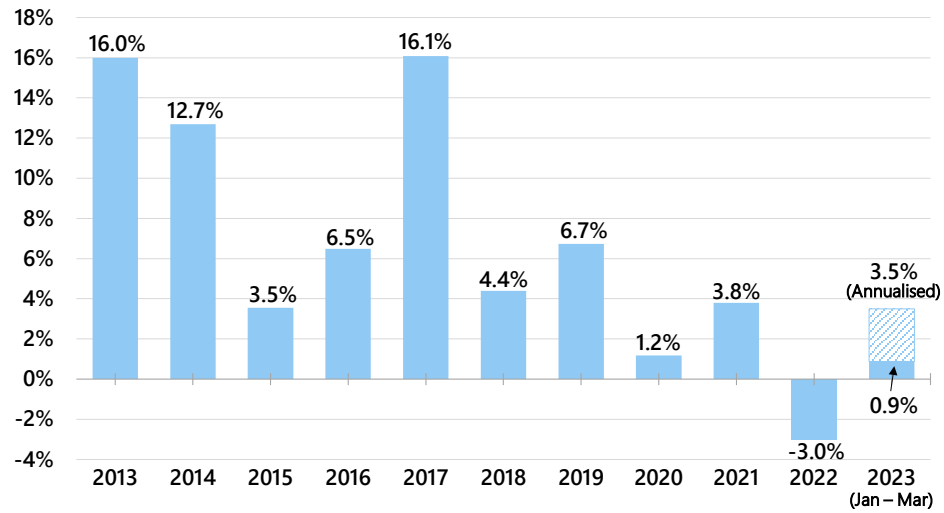
- The NIM of retail banks' Hong Kong businesses widened to 1.31% in 2022 compared with 0.98% in 2021.

Banking sector performance



Total loans grew slightly

Credit growth rate



Source: HKMA

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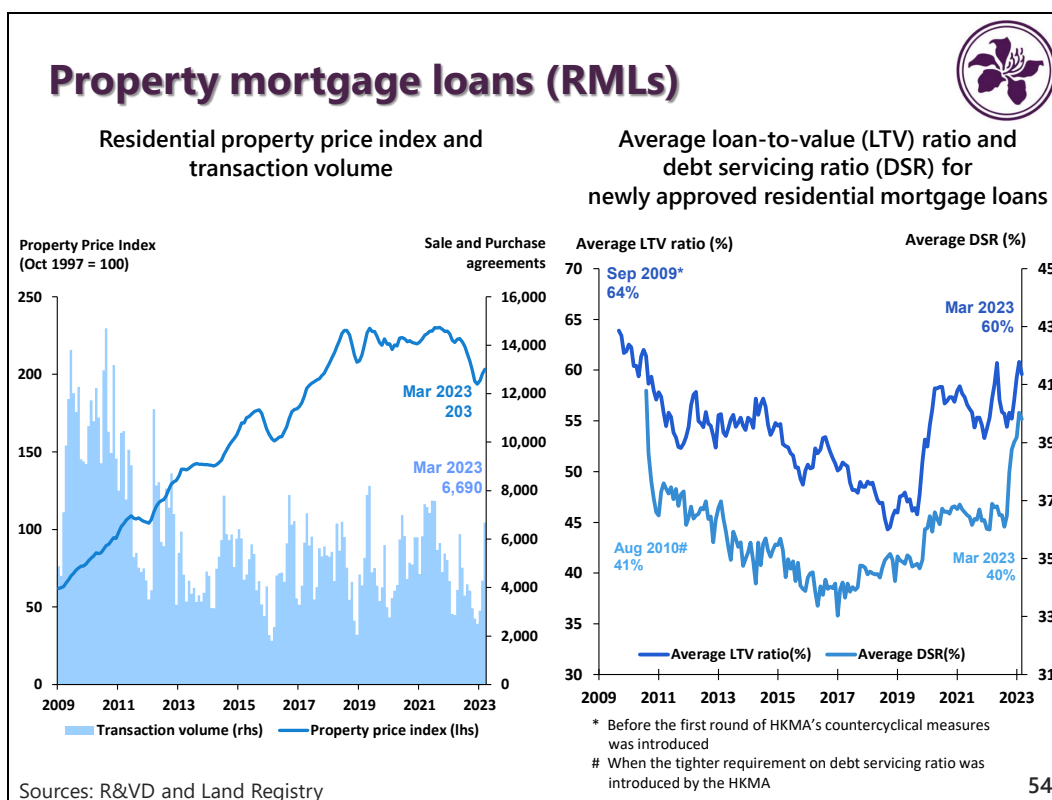
- Total loans increased by 0.9% in the first quarter of 2023, or 3.5% on an annualised basis.

Supporting SMEs



Pre-approved Principal Payment Holiday Scheme

- Participation rate of eligible corporates declined to 1% from 16% initially
- Uptake of partial principal repayment increases steadily
- To engage stakeholders on the way forward for the Scheme after its expiry in July 2023



Latest statistics on RMLs

	Monthly average in 2021	Monthly average in 2022	Oct 2022	Nov 2022	Dec 2022	Jan 2023	Feb 2023	Mar 2023
Number of sale and purchase agreements	6,191	3,754	3,148	2,731	2,507	3,051	4,282	6,690
Number of new RML applications	14,060	9,524	7,280	7,792	7,510	7,342	9,719	11,553
Number of new RMLs approved	10,121	7,413	6,341	5,840	5,255	5,353	7,170	9,364

Latest statistics on residential property prices

Property price index		Period	Property price index
Rating and Valuation Department (10/1997=100)	Latest position	3/2023	203.2
	Recent peak	9/2021	230.2
	Peak in 1997	10/1997	100.0
Centaline (6/7/1997=100)	Latest position	16/4/2023	168.3
	Recent peak	8/8/2021	191.3
	Peak in 1997	19/10/1997	103.5

International standards implementation



Basel III final reforms

- Amendments to Banking (Capital) Rules and Banking (Disclosure) Rules

Consequential and other updates

- Amendments to Banking (Exposure Limits) Rules and Banking (Liquidity) Rules

Target implementation date(s)

- No earlier than 1 January 2024

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Basel III final reforms

- The HKMA is currently working towards implementing the revised capital standards in the Basel III final reforms based on a local schedule that takes into account the latest implementation timelines of a number of major jurisdictions:
 - those on credit risk, operational risk, leverage ratio, as well as on the output floor (for the use of internal models) will take effect no earlier than 1 January 2024;
 - those on market risk and credit valuation adjustment risk will take effect on 1 January 2024 initially for reporting purposes only, and no earlier than 1 January 2024 for the actual capital requirements; and
 - the corresponding disclosure requirements will follow the effective dates of their associated capital standards.
- The HKMA aims to complete the rule-drafting for the amendment rules to be submitted to LegCo within 2023. This will provide banks with sufficient time to ready their systems for implementation.

Consequential and other updates

- Other amendments will be submitted to LegCo alongside the amendments to the Banking (Capital) Rules and the Banking (Disclosure) Rules. These include:
 - some consequential amendments to the Banking (Exposure Limits) Rules and the Banking (Liquidity) Rules, together with certain technical refinements to enhance clarity and better reflect the policy intent of some existing provisions; and
 - miscellaneous amendments to the Banking (Capital) Rules to facilitate the implementation of a positive neutral Countercyclical Capital Buffer.

Anti-money laundering and counter-financing of terrorism (AML/CFT)



- Developed and shared “Do’s and Don’ts” list and good industry practices, including for Source of Wealth, to help private banks deliver risk-based and balanced AML/CFT work
- Updated Guidance on transaction monitoring, screening and suspicious transaction reporting to help banks optimise financial crime detection through enhanced use of data and technology
- Co-hosted a sharing session with Hong Kong Police Force (HKPF) to explore innovative approaches, together with retail banks, in order to strengthen the eco-system response to fraud and mule account network

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- **Developed and shared guidance and good practices to help private banks apply AML/CFT requirements on Risk Based Approach (RBA)** to deliver effective outcomes and support the Government strategy to strengthen Hong Kong’s competitiveness as a major asset and wealth management centre in the region, including (i) establishing source of wealth and source of funds; (ii) ongoing monitoring; and (iii) AML Regtech adoption.
- **Guidance Paper on transaction monitoring, screening and suspicious transaction reporting:** Updated with a key objective to support the greater use of data and technology (e.g. inclusion of digital footprint data) by banks to generate targeted alerts and optimise their financial crime detection and reporting, to deliver more actionable intelligence into the AML/CFT eco-system. This is part of wider efforts to encourage and support innovation in banks’ AML/CFT systems and processes to effectively manage heightened financial crime threats.
- To strengthen the eco-system response to fraud and mule account network, the HKMA and the HKPF co-hosted a high-level sharing session on 21 April with senior representatives from retail banks to jointly explore new and innovative approaches to anti-deception efforts, and to chase and intercept the illicit proceeds. Building upon the long history of close collaboration among the HKMA, the HKPF and the banking industry, participants are committed to continuing to work closely with all stakeholders to promote public awareness of evolving modus operandi of deception cases and support innovative ways of anti-deception efforts. These include enhancement of Scameter alerts to customers for payment transactions, encouraging more banks to adopt data analytics through AMLab and other innovative approaches to real time monitoring of suspicious accounts, launching a sharing platform of corporate mule account information among banks, as well as enhancing banks’ contribution to the 24/7 stop-payment mechanism and assistance to investigation work of the HKPF.

Resolution regime



- Set out and communicated 2023 resolution planning priorities for individual systemically important / large banks
- Engaging with relevant banks on preparation for meeting the Financial Institutions (Resolution) (Contractual Recognition of Suspension of Termination Rights — Banking Sector) Rules requirements starting from August 2023

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- As part of the HKMA’s bilateral resolution planning programmes with banks, 2023 resolution planning priorities for individual systemically important or large banks were set out and communicated to the accountable executives of these banks in February 2023.
- To enhance the resilience and resolvability of these banks, 2023 resolution planning priorities are mainly set in the areas of: (i) loss-absorbing capacity; (ii) operational continuity in resolution; (iii) early termination risk in resolution; (iv) liquidity and funding in resolution; (v) continuity of access in resolution to financial market infrastructure; and (vi) core resolution information submission.
- Under the bilateral resolution planning programmes, the HKMA has been engaging with banks on their work to identify and mitigate early termination risks arising from discontinuity of financial contracts in resolution, including the preparation work for meeting the Financial Institutions (Resolution) (Contractual Recognition of Suspension of Termination Rights—Banking Sector) Rules (“Stay Rules”) requirements.
- Under the Stay Rules, the contractual recognition requirements for covered contracts entered into by a covered entity with an authorized institution or a global systemically important bank should be met by August 2023. The requirements for any other covered contracts should be met by February 2024.

Green and sustainable banking



- Working with experts to develop a local green classification framework to align with the Common Ground Taxonomy (CGT), and will propose the structure and core elements of the framework for consultation in the first half of 2023
- Building a common platform, comprising a database and a tool, for banks to carry out physical risk assessment

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- We are working with experts to develop a green classification framework, and will propose the structure and core elements of the framework for a consultation, targeted in the first half of 2023. Our work will be guided by the principles of interoperability, comparability and inclusiveness, with the aim to facilitate easy navigation among the CGT, China and the European Union's taxonomies. We will also take into account local considerations and other industry standards commonly adopted by the industry.
- To accelerate the banking sector's progress in managing climate risks, there is a need to build up banks' capacity in understanding and assessing climate risks and to improve data availability so that banks can have consistent and granular data to conduct climate risk assessments. We are building a common platform, comprising a database and a tool, to facilitate banks' assessment of the impact of physical risk on real estate. We will engage the industry to ensure that the platform can effectively assist banks in their risk assessments.

Talent development in banking sector



Attract and nurture the younger generation to create talent pipeline

- Offered around 210 gap year internship positions to university students by the HKMA, Hong Kong Applied Science and Technology Research Institute Company Limited, 20 banks and 9 insurance companies through the Fintech Career Accelerator Scheme 2023/24
- Creating more sustainable finance internship opportunities for students through the Green and Sustainable Finance Cross-Agency Steering Group's Sustainable Finance Internship Initiative. Provided five training sessions to students in January to February 2023, attracting over 150 attendees to each of the session

Talent development in banking sector



Reskill and upskill the existing workforce to keep pace with digital transformation and business development

- Planning to share good practices for talent development with the industry, covering manpower planning, upskilling the workforce, reskilling the workforce, recruiting talents, and investment in talents
- Enhanced Competency Framework for Banking Practitioners – Launched the industry consultation on the new module on Green and Sustainable Finance at end-February 2023

Financial inclusion



- New mobile bank branch deployed for public housing estates
- Shared observations and good practices on bank account opening
- Facilitated exchanges between the banking industry and virtual asset service providers

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- The HKMA has been encouraging the banking industry to put the spirit of financial inclusion into practice. It is encouraging to note that a retail bank has deployed an additional new mobile bank branch in Q1 2023, covering five public housing estates (PHEs) in Aberdeen, Chai Wan, Kowloon City, Tung Chung and Tuen Mun. To date, the total number of mobile bank branch in Hong Kong has increased to 7, covering a total of 33 PHEs, thereby enhancing the access to basic services in remote areas and PHEs.
- The HKMA issued a circular on 27 April 2023 to share with AIs the observations and good practices identified through our ongoing exchanges with stakeholders. The circular also sets out guidance to AIs in respect of customer communication, understanding of market developments and risk management to further assist AIs in achieving effective outcomes and enhancing customer experience in bank account opening. AIs are also required to review their account opening procedures and customer due diligence measures, and provide staff training.
- The HKMA, in collaboration with the Securities and Futures Commission, organised a roundtable session on 28 April 2023 to facilitate direct exchange of views and sharing of information among the banking industry and virtual asset service providers.

Banking consumer protection



- Issued new guidance on handling of unauthorised payment card transactions and binding payment cards for contactless mobile payments
- Finalising the details of enhancements to the Code of Banking Practice
- Credit Reference Platform under the Multiple Credit Reference Agencies (CRAs) Model commenced operation

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- In view of a growing number of unauthorised payment card transactions involving frauds and scams recently, the HKMA issued new guidance on 25 April 2023 setting out principles for handling of unauthorised payment card transactions, with a view to enhancing consumer protection. The circular sets out that, when a cardholder has taken reasonable care and precautions in safeguarding card and card information, and reporting unauthorised transactions to banks, banks should give full consideration when considering any losses that they propose the cardholder to bear. In addition, banks should also take into account other relevant circumstances including specific background and circumstances of the cardholder (e.g. vulnerable customers).
- Given the recent rise in unauthorised transactions involving the binding of the victim's credit card to a new mobile payment app, the HKMA has provided guidance to the industry. The latest guidance requires banks to perform additional authentication for binding of credit cards to a new mobile payment app, such as 2-way SMS, in-App confirmation or callback, in addition to issuing an SMS one-time-password, so as to confirm that the customer has really given such binding instructions.
- The HKMA is working with the industry in reviewing the details of enhancements to the Code of Banking Practice. Enhancement measures include further strengthening of protection to banking consumers with respect to digital banking services; supporting customers' assessment of risks and repayment ability to promote responsible borrowing by consumers; enhancement of customers' ability in credit management; and strengthening fair treatment of customers throughout the banking lifecycle.

- The HKMA has been working closely with Hong Kong Association of Banks, the Hong Kong Association of Restricted Licence Banks and Deposit-taking Companies and the Hong Kong S.A.R. Licensed Money Lenders Association Limited (collectively referred to as “Industry Associations”) to introduce more than one consumer CRA in Hong Kong, with a view to enhancing the service quality of consumer CRAs and reducing the operational risk of having only one commercially-run consumer credit information service provider in the market, particularly the risk of single point of failure.
- The Credit Reference Platform under the Multiple CRAs Model was launched on 28 November 2022. Participating credit providers have completed uploading of consumer credit data onto the platform, which are being downloaded by the selected CRAs in preparation for their provision of consumer credit reference services.

Banking investor protection



- Completed review of investment product selling processes and shared observations
- Consulted industry on streamlining selling processes for sophisticated high net worth investors
- Consulting industry on the streamlined arrangement for audio-recording requirement of Protection Linked Plan

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- The HKMA has recently completed a thematic review of investment product selling processes and identified some practices or possible misunderstandings by banks in relation to regulatory standards, which might have made the selling process unnecessarily long. The HKMA shared in a circular on 27 February 2023 observations noted from the review, alongside the relevant regulatory standards, including the flexibility already allowed, on product risk disclosure, assessment of customer's investment horizon and concentration risk, execution-only transactions and audio-recording of the selling processes. The circular encourages banks to review their policies, procedures and practices, and streamline their selling processes as appropriate, with a view to improving customer experience while according investor protection.
- To enhance customer experience and provide investor protection on a risk-based principle, the HKMA and the Securities and Futures Commission are developing guidance to streamline the product due diligence, suitability assessment and product disclosure processes for sophisticated high net worth investors. An industry consultation has been completed and the regulators aim to finalise the measures as soon as possible.
- The HKMA is conducting an industry consultation on the streamlined arrangement for audio-recording requirement of Protection Linked Plan with a view to enhancing customer experience.

Public education and social media



- Another round of cross-media promotion themed “Protect your Personal Digital Keys, Beware of Fraudulent Links!” to remind the public to beware of phishing scams
- Enriched secondary school teachers and students’ understanding on digital and sustainable economy through a seminar
- Radio promotion on smart use of credit cards and “Buy Now, Pay Later” product during holiday season
- Livestreamed the “Future-proof Supervision for an Innovative Banking World” conference, jointly organised by the HKMA and Bank for International Settlements (BIS), on HKMA official YouTube and WeChat channels to facilitate public participation in this international conference



Deposit Protection Scheme (DPS)



- The DPS, established in 2006, has been effective in maintaining depositors' confidence in the banking system in Hong Kong
- Under the current protection limit of HK\$500,000, close to 90% of depositors are fully covered
- To ensure DPS remains in line with international best practice and latest developments in Hong Kong, the Hong Kong Deposit Protection Board (the Board) conducted a comprehensive review of the DPS in the past year or so
- The Board aims to launch a public consultation later this year on proposed enhancements to the DPS

Deposit Protection Scheme (DPS)



Promoting the public awareness and understanding of the DPS

- Rolled out an in-person consumer campaign “DPS Guardian Wagon” to promote the DPS at high-foot traffic spots
- Collaborated with a local media to implement the “Ah Chuen & Ah Po Team Up Battle” video campaign on social media platforms



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- A variety of publicity initiatives were executed to promote the public awareness and to deepen the understanding of the DPS:
 - Rolled out an in-person consumer campaign “DPS Guardian Wagon” in the first quarter of 2023 with a promotional truck parked at different high foot-traffic spots around town for six consecutive weekends to engage passers-by with a series of interactive educational games and distribution of promotional giveaways.
 - Collaborated with a local media to implement “Ah Chuen & Ah Po Team Up Battle” video campaign on social media platforms to convey the DPS messages via different action games in order to reach a wider young audience.



Financial Infrastructure

Financial infrastructure: overview



Payment systems

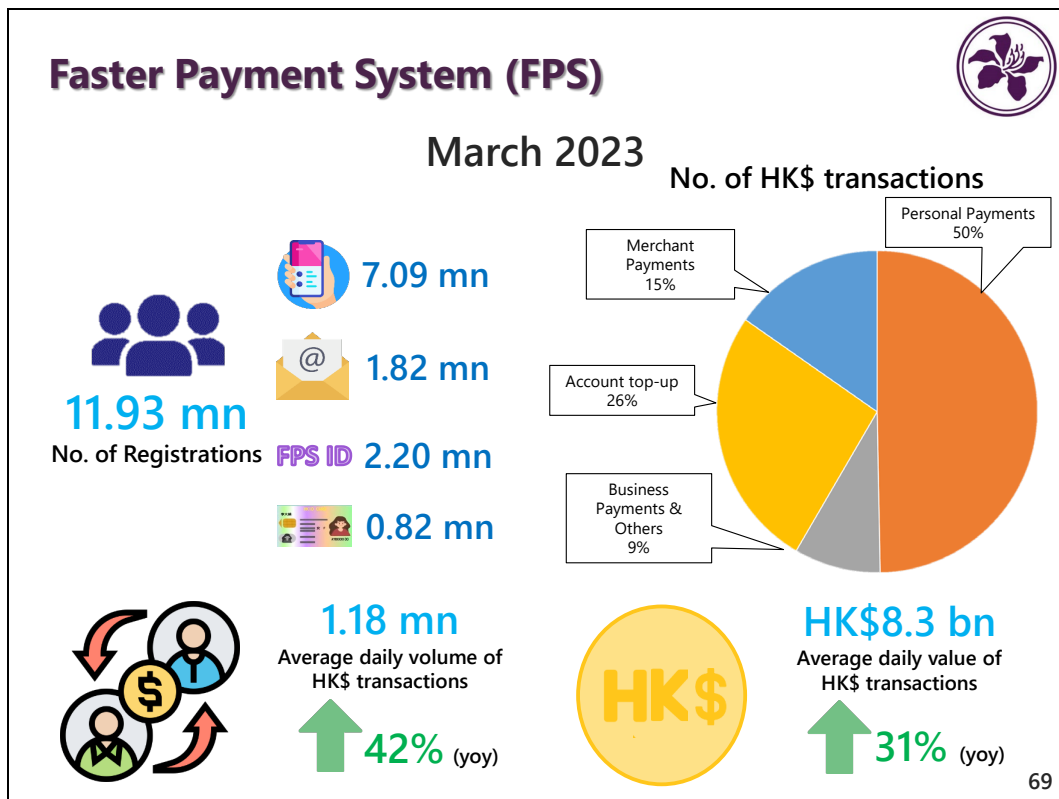
- Four Real Time Gross Settlement (RTGS) Systems for HKD, RMB, USD and Euro:
 - Average daily turnover in Q1 2023 reaching HK\$1,094 billion, RMB1,565 billion, US\$51 billion and €0.6 billion respectively
- Faster Payment System:
 - The number of registrations recorded 11.93 million as at end-March 2023; the average daily number of Hong Kong dollar real-time transactions rose by 42% year on year to 1.18 million in March 2023

Central Moneymarkets Unit (CMU)

- Providing settlement and custodian service for debt securities, by end-March 2023:
 - HK\$2,890 billion equivalent outstanding debt securities lodged with CMU
- Supporting Bond Connect (Q1 2023)
 - For Northbound Trading: trading volume was RMB2.2 trillion
 - For Southbound Trading: trading volume reached RMB81.4 billion

Hong Kong Trade Repository: maintains an electronic database of over-the-counter derivative transactions

- 4,342,140 outstanding transactions at end-March 2023



- The number of registrations and turnover of the FPS have been growing steadily. At end-March 2023, the FPS recorded 11.93 million registrations (including 7.09 million in mobile number, 1.82 million in email address, 2.2 million in FPS ID and 0.82 million in HKID number), up by 18% or 1.82 million registrations year on year (yoy).
- The usage of FPS has expanded gradually to merchant payments and top-up transactions from primarily P2P transactions previously.
- The turnover of the FPS continues to grow. The average daily HKD real-time transactions reached 1.18 million (rose by 42% yoy), worth HK\$8.3 billion (rose by 31% yoy) in March 2023.

Development of Central Moneymarkets Unit (CMU)



- To help Hong Kong grasp the opportunities from the further opening up of the Mainland financial markets, the CMU has commenced enhancements on both system and business fronts, with a long-term objective of becoming a major international central securities depository (CSD) in Asia
- Some of the enhancements and services have been launched, and the rest would be rolled out in phases over next few years:
 - Collateralised lending service for primary issuance (launched in April 2022)
 - New CMU website (launched in July 2022)
 - New tender display (launched in October 2022)
 - New open application programming interface (API) and new user interface (to be launched in July 2023)
 - New CMU platform development in progress

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- Being a critical financial infrastructure operated by the HKMA, CMU is a CSD providing safe, efficient and convenient clearing, settlement and custodian services for debt securities, which in turn supports the bond market development in Hong Kong.
- To seize the opportunities from Bond Connect, the HKMA has reviewed the strategic position of CMU and will gradually develop CMU into a major international CSD in Asia. To realise such goal, CMU will commercialise its business and operation to develop value-added services in two main areas:
 - **System Enhancement**
 - To launch a new CMU website to provide the industry and public with a quick and convenient means of searching for bond market information (launched in July 2022);
 - To launch a new tender display for PBOC Bills and CMOF sovereign bonds tender events (launched in October 2022);
 - To launch a new open API and a new user interface (with dashboard, e-lodgement and account opening services) in July 2023 to provide CMU members with a more hassle-free experience; and
 - To introduce a new CMU system with a more flexible account structure and settlement mechanism, and enhanced collateral management function.
 - **Introduction of new services**
 - Collateralised lending service to provide free intra-day liquidity for primary issuance (launched on 1 April 2022). Since the introduction, the service has so far been used to support bond issuance with RMB30.42 billion and €1.25 billion.
 - The new CMU platform will support 24-hour operation to better serve investors in different time zones.

Latest fintech initiatives



Central Bank Digital Currency (CBDC)

- For wholesale CBDC (mBridge): working towards developing the mBridge platform into a Minimum Viable Product (MVP) and ultimately a production-ready system
- For retail CBDC (e-HKD): laying the groundwork for the potential implementation of e-HKD by adopting a three-rail approach

Commercial Data Interchange (CDI)

- The connection between CDI and the Commercial Credit Reference Agency (known as "CCRA@CDI") has come into operation; expecting banks with material SME business to complete their technical connection to CCRA@CDI by the end of 2023

Industry Project Masters Network (IPMN)

- Benefitted more than 130 postgraduate students as of March 2023

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Wholesale CBDC (mBridge)

- In the third quarter of 2022, the project went beyond experimentation and entered the pilot phase. During the six-week pilot, 20 banks in four jurisdictions used the mBridge platform to conduct over 160 payment and foreign exchange transactions totalling more than HK\$171 million. It was among the first multi-CBDC projects to settle real-value, cross-border transactions on behalf of corporates.
- The HKMA and the rest of the project team will continue to work towards developing the mBridge platform into MVP and ultimately a production-ready system.

Retail CBDC (e-HKD)

- The HKMA adopts a three-rail approach to prepare for the possible implementation of e-HKD:
 - Rail 1: to lay the technology and legal foundations
 - Rail 2: runs in parallel to Rail 1; to take deep dives on application research and pilots
 - Rail 3: to consolidate the outcomes of Rails 1 and 2 and set the timeline for launching e-HKD

Commercial Data Interchange (CDI)

- As of March 2023, it was estimated that CDI had facilitated the approval of more than 2,300 loans, amounting to about HK\$2.1 billion, since its production launch in October 2022.
- CCRA@CDI allows connected banks to gain access to machine-readable credit reference data of corporates for more automated customer onboarding, credit approval and ongoing credit review and monitoring processes.

Industry Project Masters Network (IPMN)

- Launched officially in September 2022 to provide opportunities to master's degree students majoring in fintech to work on real-life fintech projects.

Stored value facilities (SVFs) and retail payment systems (RPSs)



- SVF usage continued to grow in Q4 2022:
 - Average daily transaction number: 21.05 million (+2.5% year-on-year (yoy))
 - Average daily transaction value: HK\$1,754 million (+15.2% yoy)
- Continue to supervise SVF licensees in a risk-based manner, taking targeted supervisory actions where necessary
- Continue to oversee six designated RPSs

Regulatory development of the over-the-counter (OTC) derivatives market



- The HKMA and Securities and Futures Commission (SFC) jointly published a consultation paper in March 2023 on the proposed amendments to the Clearing Rules for over-the-counter derivative transactions pursuant to global interest rate benchmark reform. The conclusion to the consultation is targeted to be published in Q3 2023 with a view to implementing the amendments to the Clearing Rules in Q1 2024
- As of end-March 2023, the Hong Kong Trade Repository logged a total of 4.34 million outstanding OTC derivatives trades, covering five asset classes under mandatory reporting requirements, i.e. foreign exchange, interest rate, equity, credit, and commodity derivatives

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- On 10 March 2023, the HKMA and SFC launched a joint consultation on proposed changes to the types of transactions subject to clearing obligations under the Clearing Rules for over-the-counter derivatives. The proposals are in line with global interest rate benchmark reform, particularly the transition from the use of interbank offered rates (IBORs) to alternative reference rates (ARRs). It is proposed that the current requirement under the Clearing Rules to clear certain OTC derivative transactions referencing IBORs that are, or will no longer be, published or considered representative would be replaced by the new requirement to clear certain OTC derivatives transactions referencing the relevant ARR.

Interest rate benchmark reforms



The HKMA is:

- Actively participating in discussion in international fora and closely monitoring relevant developments;
- Working with the Treasury Markets Association to encourage the use of Hong Kong Dollar Overnight Index Average (HONIA), gauging industry views and promoting market awareness; and
- Continuing to facilitate Als' preparation for the discontinuation of US dollar LIBOR

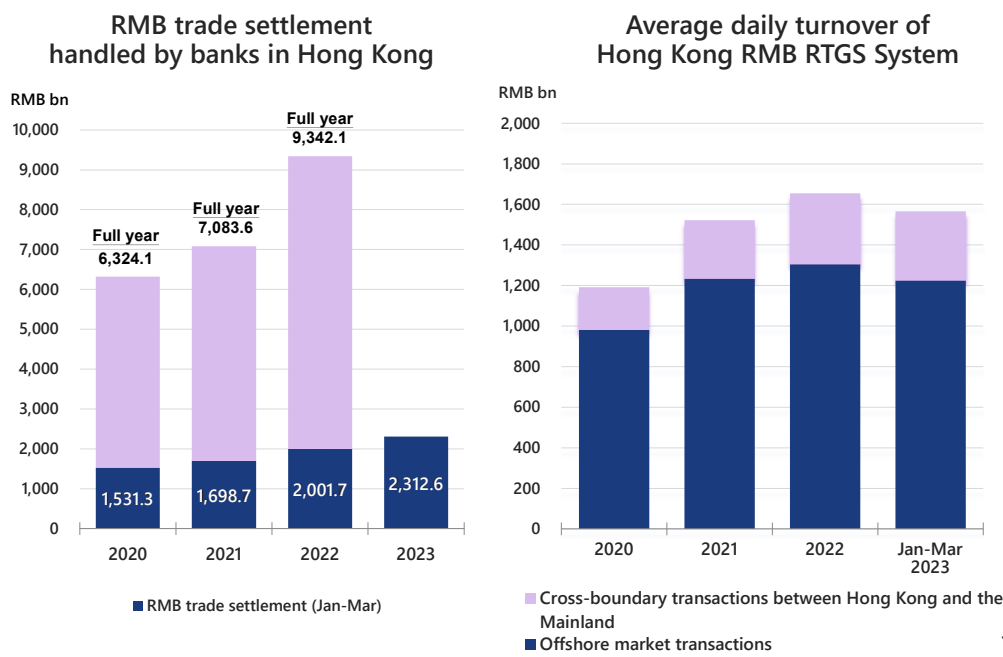
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- The UK Financial Conduct Authority (FCA) has discontinued all sterling, euro, Swiss franc and Japanese yen LIBOR settings, and the 1-week and 2-month US dollar LIBOR settings after 31 December 2021 as planned, and new contracts should use the respective alternative reference rates. Overnight, 1-month, 3-month, 6-month and 12-month US dollar LIBOR settings will continue to be published until end-June 2023.



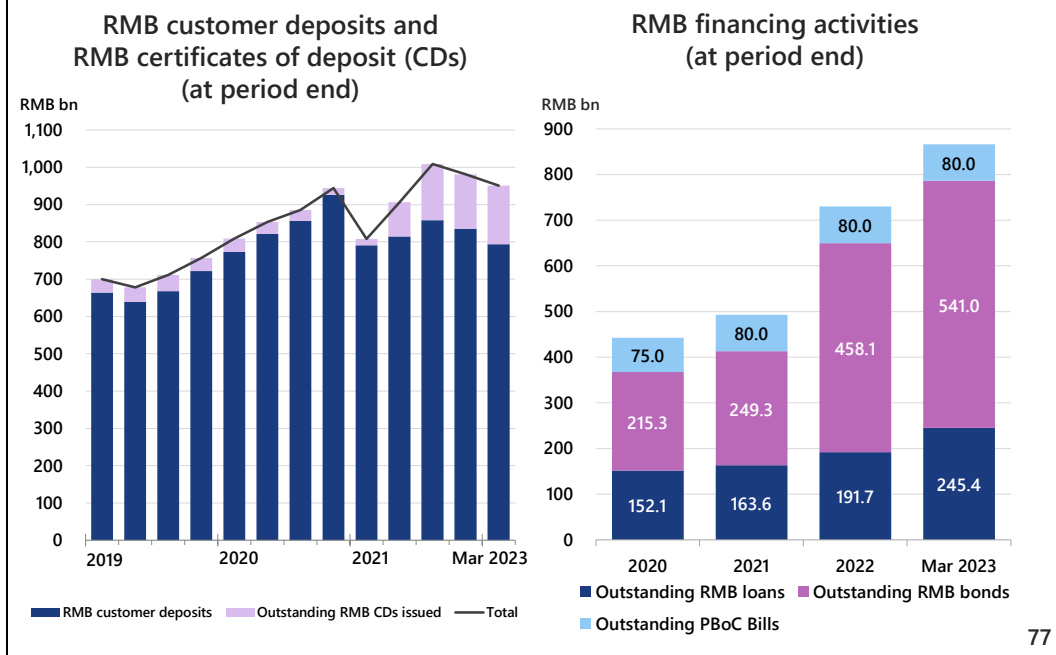
Hong Kong as an International Financial Centre

Hong Kong as offshore RMB business hub: RMB trade settlement and payment



- In the first quarter of 2023, renminbi (RMB) trade settlement handled by banks in Hong Kong totalled RMB2,312.6 billion.
- In the first quarter of 2023, the average daily turnover of Hong Kong RMB Real Time Gross Settlement (RTGS) system stood at RMB1,565.1 billion.

Hong Kong as offshore RMB business hub: RMB liquidity pool and financing activities



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- As at end-March 2023, RMB customer deposits and outstanding RMB CDs amounted to RMB794.1 billion and RMB156.5 billion respectively, totalling RMB950.6 billion.
- As at end-March 2023, outstanding RMB loans amounted to RMB245.4 billion. Outstanding dim sum bonds (including RMB CDs) amounted to RMB541.0 billion. Outstanding PBoC bills issued in Hong Kong amounted to RMB80.0 billion.

Mutual market connect schemes



- **Northbound Trading under Bond Connect** remained active. In the first quarter of 2023, average daily turnover amounted to RMB37.0 billion. **Southbound Trading** has been smooth and well received by the market. Collaborating with relevant Mainland authorities to explore possible enhancements to Southbound Trading
- **Cross-boundary Wealth Management Connect** has been operating smoothly. To date, 24 eligible Hong Kong banks have launched services. Closely liaising with Mainland authorities on enhancements (e.g. expanding the scope of eligible products and participating institutions, and improving sales arrangements)
- Preparation for **Swap Connect** under way, Northbound Trading to be launched when ready
- **Dual-counter market maker regime** to facilitate the trading of Hong Kong-listed stocks in RMB in good progress, target launch in the first half of 2023. A number of Hong Kong-listed companies have indicated interest in applying for the addition of an RMB trading counter.
- Continue collaboration with Mainland authorities to deepen financial market connections, e.g. broadening Southbound Trading of Stock Connect to include RMB counters, and introduction of Mainland government bond futures in Hong Kong

Developing the asset and wealth management industry



- Hong Kong's private equity industry has remained robust, with US\$212.1 billion of total capital under management as at end-March 2023*. The limited partnership fund regime continued to see momentum – 613 funds had been established as at end-March 2023
- The family office tax concession bill was introduced into the Legislative Council on 14 December 2022 and will apply retrospectively from 1 April 2022 if passed into law

Developing the bond market



- Hong Kong is a leading bond issuance centre in Asia. A recent report by the International Capital Market Association suggests that Hong Kong has been, for seven consecutive years, the largest hub for arranging bonds issued internationally by Asia-based entities, capturing 30% of the market in 2022
- To promote market innovation and technology adoption, the HKMA assisted the Government to issue the **inaugural tokenised green bond** in February 2023, which is the first of its kind globally. The HKMA is working on a white paper to summarise the experience learnt from this issuance and set out the next steps

Promoting green finance (1)



- Total green and sustainable debt instruments issued in Hong Kong reached a record high of over US\$80 billion in 2022, up by over 40% year on year*
- The Green and Sustainable Finance Cross-Agency Steering Group (CASG) co-chaired by the HKMA and the SFC continued the work on capacity building and data availability under the Centre for Green and Sustainable Finance (GSF Centre). In particular,
 - In January and February 2023, the CASG conducted five training sessions for students under the Sustainable Finance Internship Initiative on topics of regulatory policy, market development and green start-up
 - GSF Centre continued to administer the Pilot GSF Capacity Building Support Scheme which was launched in December 2022, receiving positive feedback from the industry
 - In March, the CASG conducted a joint seminar with CDP# to promote the use of the SME Questionnaire on Climate and Environmental Risk. The seminar brought together around 500 on-site and online participants from different sectors

* Source: HKMA staff estimates based on statistics from ICMA and LoanConnector

CDP is an international non-profit organisation that runs the global environmental disclosure system for companies

- The CASG aims to co-ordinate the management of climate and environmental risks to the financial sector, accelerate the growth of green and sustainable finance in Hong Kong and support the Government's climate strategies. Other members include the Financial Services and the Treasury Bureau, the Environment and Ecology Bureau, the Hong Kong Exchanges and Clearing Limited, the Insurance Authority and the Mandatory Provident Fund Schemes Authority.

Promoting green finance (2)



- The HKMA is assisting the Government on the post-issuance work of the green bonds issued in January and February 2023, and formulation of the issuance plan for 2023-24
- The HKMA continues to administer and promote the Green and Sustainable Finance Grant Scheme to attract more green and sustainable financing activities to Hong Kong. The scheme has been well received by the market; by March 2023 it has provided financial support for over 220 green and sustainable debt instruments issued in Hong Kong totalling over US\$70 billion

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- To attract more green and sustainable financing activities to Hong Kong, the Government launched a three-year Green and Sustainable Finance Grant Scheme in May 2021 to cover part of the expenses on bond issuance and external review services. The scheme also encourages more financial and professional service providers and external reviewers to set up their regional hubs in Hong Kong.

Crypto-assets and stablecoins



- On 31 January 2023, the HKMA issued the consultation conclusion to the discussion paper on crypto-assets and stablecoins, summarising the feedback received in relation to the aforesaid paper and the HKMA's relevant response
- In the consultation conclusion, the HKMA confirms that it will bring certain activities relating to stablecoins into the regulatory perimeter, and sets out the expected regulatory scope and key regulatory requirements
- Respondents were supportive of regulating stablecoins with a risk-based and agile approach
- In terms of next steps, the HKMA will conduct further consultation with more details of the proposed regulatory parameters before submitting the Bill to the Legislative Council. The regulatory regime is expected to be implemented in 2023/24



Government Bond Programme

Retail bonds – outstanding as at end-March 2023

- Two iBonds, totalling HK\$35 billion
- Three Silver Bonds, totalling HK\$87.6 billion

Institutional bonds – outstanding as at end-March 2023

- 17 institutional bonds, totalling HK\$83.5 billion
- One Islamic bond, totalling US\$1 billion

Hong Kong Academy of Finance (AoF)



- **Financial Leaders Programme** – The Programme has admitted 24 financial talents with a balanced mix of backgrounds and expertise for the 2023 Cohort. Programme activities have commenced in April 2023 and will run for nine months
- **Financial Leadership Development** – A number of major events were held during February to April 2023
- **Research and Knowledge Exchange Activities** – The Hong Kong Institute for Monetary and Financial Research (HKIMR) released an applied research report, four applied research papers and eight working papers and organised three scholar seminars. In addition, the HKIMR and the International Monetary Fund (IMF) HKSAR Sub-Office co-organised three seminars

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Financial Leaders Programme

- The AoF launched the Financial Leaders Programme in November 2021 to nurture financial talents from a mix of different backgrounds and expertise. The second year of the Programme will run for about nine months, from April to December 2023. It is offered on a part-time basis.
- The first year of the Programme has been a great success, with a lot of positive feedback received from the speakers and participants. The inaugural cohort had 19 participants graduated in December 2022. The participants appreciated that the Programme offered them high-level and strategic perspectives, enriched their understanding of various financial topics and trends which better prepare them for upcoming opportunities and challenges, and expanded their professional networks.

Financial Leadership Development

- The AoF organised a hybrid event under Distinguished Speakers Series with Mr Jonathan Gray, President and Chief Operating Officer of Blackstone on 16 February 2023.
- The AoF co-organised a seminar with Civil Service College titled “China's Economic Development and Prospects after the 14th National People's Congress” on 3 April 2023. The speaker and moderator were Professor Huang Yiping, Deputy Dean of the National School of Development and Director of the Institute of Digital Finance of Peking University and Dr Helen Qiao, Managing Director and Chief Economist for Greater China and Head of Asia Economics Research of Bank of America respectively. About 120 senior civil servants and AoF Members and guests attended.

Research and Knowledge Exchange Activities

- A new applied research report titled “Cross-boundary Payment and Settlement Systems in the Greater Bay Area: Current Practices and Recent Developments” was released by the HKIMR in March 2023.
- The HKIMR released four applied research papers and eight working papers and organised three scholarly seminars on monetary and financial research topics.
- The HKIMR and the IMF HKSAR Sub-Office co-organised three seminars: (i) seminar on “China’s Rebound: Recent Developments and Outlook” on 9 March; (ii) presentation of the latest IMF World Economic Outlook report in a seminar titled “Navigating Through a Challenging World” on 17 April; and (iii) presentation of the April 2023 IMF Global Financial Stability Report in a seminar titled “Safeguarding Global Financial Stability amid High Inflation and Interest Rates” on 25 April.



Investment Environment and Performance of the Exchange Fund

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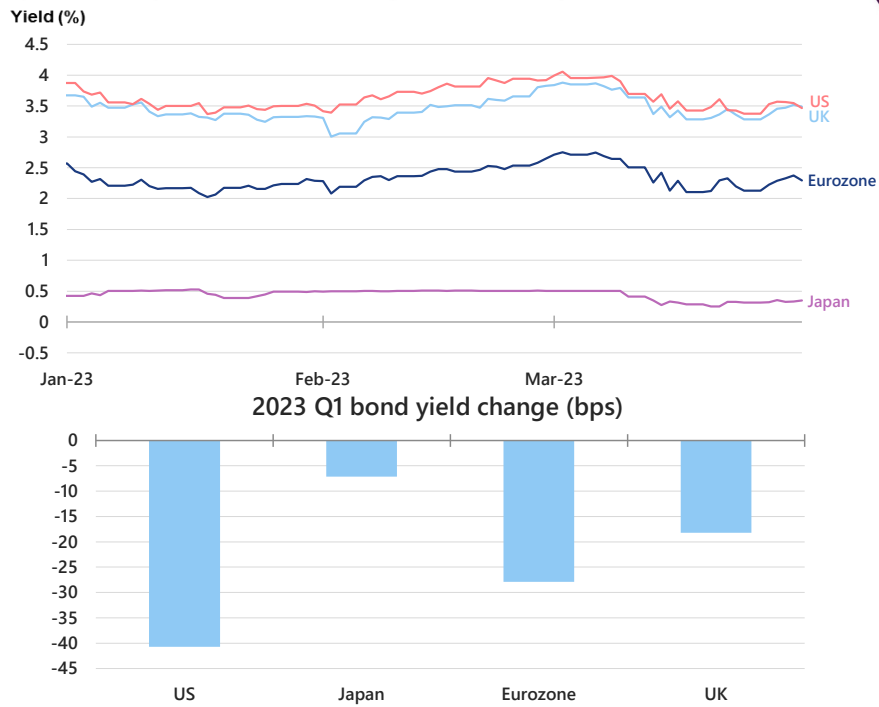


Investment environment in Q1 2023

- Global financial markets experienced significant volatility amid concerns about the stability of the US and European banking systems in the first quarter. Uncertainty surrounding the impact of the banking turmoil posed new challenges on top of persistent inflation pressure, risk of excessive policy tightening and prolonged geopolitical tensions, adding to the risk of recession
- **Interest rates:** Yields surged in February as central banks continued interest rate hikes to combat inflation. The two-year US Treasury yield rose above 5%, reaching the highest level since 2007. However, rates market reversed sharply in March as cracks in the banking system emerged, prompting expectations that the tightening cycle would end earlier
- **Equity markets:** Developed markets fell abruptly in March amid concerns on the soundness of the global banking system. Equity markets recovered towards quarter end, recording moderate growth overall, with S&P 500 up by 7% during the quarter
- **Exchange rates:** USD strength waned against slowing rates of inflation and policy pivot by the Fed. Pound sterling, euro and renminbi appreciated slightly against the dollar during the quarter

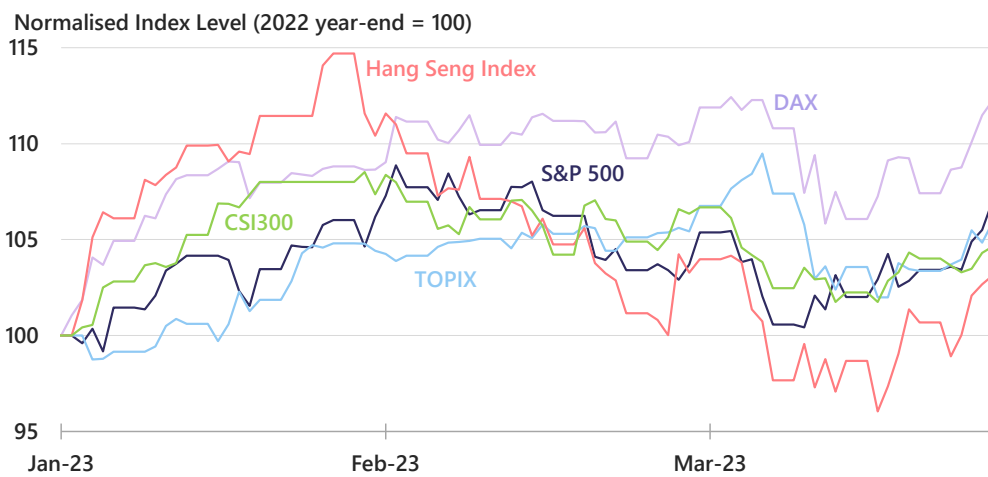
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Major 10-year sovereign bond yields fell



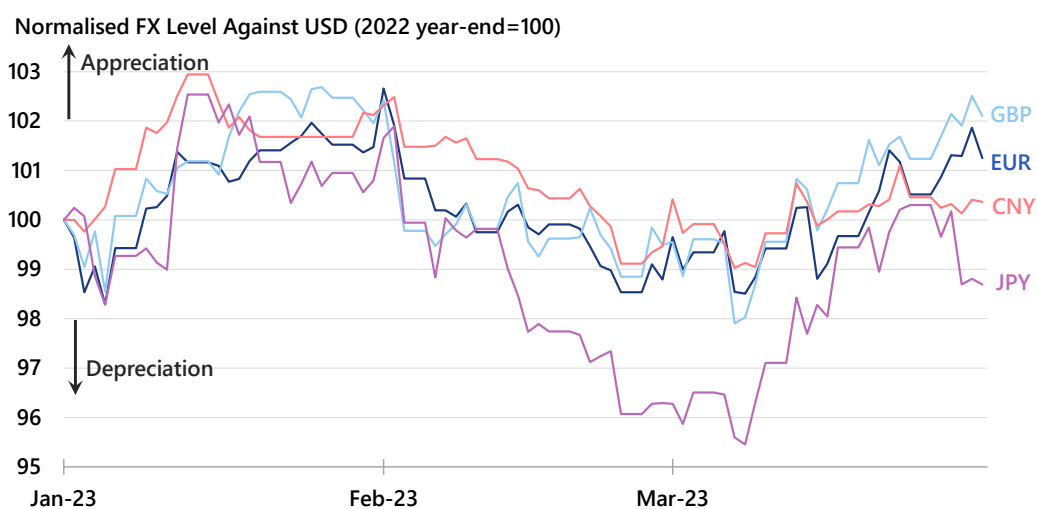
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Major equity markets rose moderately



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Major currencies strengthened slightly against USD



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Investment income



	2023	2022	2021	2020
	(unaudited)			
(HK\$ billion)	Q1	Full year	Full year	Full year
Hong Kong equities*	3.3	(19.5)	(21.0)	4.0
Other equities	25.5	(61.0)	68.8	69.9
Bonds	43.9	(53.2)	12.6	92.7
Foreign exchange[#]	25.2	(40.0)	16.8	9.6
Other investments[@]	-	(31.7)	114.7	59.6
Investment income/(loss)	97.9	(205.4)	191.9	235.8

* Excluding valuation changes of the Strategic Portfolio.

[#] This is primarily the effect of translating foreign currency assets into Hong Kong dollar after deducting the portion for currency hedging.

[@] Including valuation changes of private equity and real estate investments held under the Long-Term Growth Portfolio. Valuation changes of these investments for the first quarter of 2023 are not yet available.

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Income and expenditure



	2023	2022	2021	2020
	(unaudited)			
(HK\$ billion)	Q1	Full year	Full year	Full year
Investment income/(loss)	97.9	(205.4)	191.9	235.8
Other income	-	0.2	0.2	0.2
Interest and other expenses	<u>(11.6)</u>	<u>(18.8)</u>	<u>(6.1)</u>	<u>(14.6)</u>
Net income/(loss)	86.3	(224.0)	186.0	221.4
Fee payment to Fiscal Reserves**	(5.4)	(26.0)	(93.0)	(69.8)
Fee payment to HKSAR Government funds and statutory bodies*	(3.9)	(22.1)	(16.8)	(11.5)

* The rate of fee payment is 3.7% for 2023, 5.6% for 2022, 4.7% for 2021 and 3.7% for 2020.

This does not include the 2023 fee payment to the Future Fund because such amount will only be disclosed when the composite rate for 2023 is available.

The composite rate was -3.0% for 2022, 17.8% for 2021 and 12.3% for 2020. Fee (reversed from)/payable to the Future Fund was HK\$(9.0) billion for 2022, HK\$58.6 billion for 2021 and HK\$37.2 billion for 2020.

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Exchange Fund Abridged Balance Sheet



(HK\$ billion)	At 31 Mar 2023	At 31 Dec 2022	At 31 Dec 2021	At 31 Dec 2020
	(unaudited)			
ASSETS				
Deposits	335.2	368.8	300.8	267.0
Debt securities	2,836.0	2,773.3	3,290.0	3,238.0
Hong Kong equities*	153.6	150.4	183.2	206.9
Other equities	500.4	472.4	561.8	536.3
Other assets#	<u>251.9</u>	<u>243.1</u>	<u>234.4</u>	<u>251.0</u>
Total assets	4,077.1	4,008.0	4,570.2	4,499.2
	=====	=====	=====	=====
LIABILITIES AND EQUITY				
Certificates of Indebtedness	606.6	606.0	592.4	556.2
Government-issued currency notes and coins in circulation	13.0	13.2	13.1	12.8
Balance of the banking system	76.9	96.2	377.5	457.5
Exchange Fund Bills and Notes issued	1,210.1	1,200.3	1,148.6	1,068.9
Placements by banks and other financial institutions	75.9	99.5	-	87.6
Placements by Fiscal Reserves®	831.0	765.2	973.3	881.8
Placements by HKSAR Government funds and statutory bodies	430.5	449.0	394.3	342.5
Placements by subsidiaries	30.9	30.6	26.2	15.5
Other liabilities	<u>163.3</u>	<u>190.8</u>	<u>238.0</u>	<u>233.1</u>
Total liabilities	3,438.2	3,450.8	3,763.4	3,655.9
Accumulated surplus	638.1	556.4	805.9	842.4
Revaluation reserve	<u>0.8</u>	<u>0.8</u>	<u>0.9</u>	<u>0.9</u>
Total equity	638.9	557.2	806.8	843.3
Total liabilities and equity	4,077.1	4,008.0	4,570.2	4,499.2
	=====	=====	=====	=====

* Including shares of the Hong Kong Exchanges and Clearing Limited in the Strategic Portfolio.

Including fund injection to Exchange Fund's investment holding subsidiaries at a carrying amount of HK\$198.0 billion at 31 March 2023 (HK\$191.7 billion at 31 December 2022, HK\$190.1 billion at 31 December 2021 and HK\$193.2 billion at 31 December 2020).

® Including placements by the Future Fund of HK\$289.9 billion at 31 March 2023 (HK\$255.2 billion at 31 December 2022, HK\$217.7 billion at 31 December 2021 and HK\$205.0 billion at 31 December 2020).

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Historical investment income

(HK\$ billion)

Year	Full year	Q4	Q3	Q2	Q1
2004	56.7	33.0	14.1	(7.2)	16.8
2005	37.8	7.3	19.0	13.6	(2.1)
2006	103.8	36.0	37.1	12.5	18.2
2007*	142.2	33.4	61.8	26.3	20.7
2008*	(75.0)	8.3	(48.3)	(20.4)	(14.6)
2009*#	107.7	10.6	71.9	58.7	(33.5)
2010*#	79.4	5.9	74.5	(12.1)	11.1
2011*#	27.1	22.1	(41.4)	21.6	24.8
2012*#	111.6	30.3	42.4	(5.6)	44.5
2013*#	81.2	30.7	54.7	(23.3)	19.1
2014*#	44.7	6.1	(17.8)	43.3	13.1
2015*#	(15.8)	21.0	(63.8)	18.7	8.3
2016*#	68.1	(23.3)	47.1	18.9	25.4
2017*#	264.0	66.0	61.8	71.3	64.9
2018*#	10.9	(33.6)	9.5	0.0	35.0
2019*#	262.2	60.3	23.5	45.0	133.4
2020*#	235.8	145.0	81.2	121.6	(112.0)
2021*#	191.9	48.2	4.0	88.4	51.3
2022*#	(205.4)	73.4	(113.4)	(116.6)	(48.8)
2023* (unaudited)	N/A	N/A	N/A	N/A	97.9

* Excluding valuation changes of the Strategic Portfolio.

Including valuation changes of private equity and real estate investments held under the LTGP.

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The Hong Kong Mortgage Corporation Limited

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Mortgage Insurance Programme (MIP)



- In 2023, as of 15 April, around 15,000 applications were approved, of which about 2,300 were under the new coverage after the MIP revisions in February 2022. Over 90% of approved applications were from first-time homebuyers
- Principal moratorium or extension of repayment schedules is available to borrowers to help reduce their repayment burden

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SME Financing Guarantee Scheme (SFGS)



- The Financial Secretary announced in the 2023-24 Budget an extension of the application period of the 80% Guarantee Product, the 90% Guarantee Product and the Special 100% Loan Guarantee of the SFGS from end-June 2023 to end-March 2024
- As of 15 April 2023, over 61,600 applications were approved under the Special 100% Loan Guarantee, amounting to about HK\$125.2 billion. The average loan amount per application was HK\$2.03 million, and the average approved loan amount per borrower was HK\$3.41 million. Over 43,100 applications (around 70 %) have chosen the principal moratorium option
- As of 15 April 2023, around 32,600 applications were approved under the 80% and 90% Guarantee Products, amounting to about HK\$121.5 billion. Over 2,600 applications have chosen the principal moratorium option

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Other loan guarantee schemes



- **100% Personal Loan Guarantee Scheme:** As of 15 April 2023, around 64,900 applications were approved, amounting to about HK\$4.5 billion. Average loan size per borrower was about HK\$78,200. Over 54,900 applications (around 85%) have chosen the principal moratorium option. The application period of the Scheme is expiring in end-April this year
- **Dedicated 100% Loan Guarantee Schemes:** The Financial Secretary announced in the 2023-24 Budget to launch new 100% loan guarantee schemes to support the business resumption of the cross-boundary passenger transport and the travel industries, and to encourage taxi owners to replace their existing taxis with battery electric taxis. The loan schemes for the cross-boundary passenger transport and the travel industries are expected to be launched immediately after funding approval by the Legislative Council Finance Committee. The loan scheme for battery electric taxis is expected to be launched in mid-2023

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Reverse Mortgage Programme



As of 15 April 2023, 6,287 applications had been received:

- Average age of borrowers: 68 years old
- Average monthly payout: HK\$17,700
- Payment terms: 10-year (22.3%); 15-year (14.4%); 20-year (12.3%); life (51.1%)
- Average property value: HK\$5.9 million
- Average property age: 31 years

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HKMC Annuity Plan



Detailed business results:

	Since launch	2022	2022 (Jan – Mar)	2023 (Jan – Mar)
No. of policies issued	17,925	3,254	649	396
Total premium amount (HK\$ billion)	12.8	2.5	0.44	0.34
Average premium amount (HK\$)	715,000	777,000	675,000	856,000