IV. Non-financial sectors

The corporate sector, household sector, and real estate market constitute the main sources of risk for credit exposure of Taiwan's financial institutions. The degree of indebtedness and solvency in the corporate sector and household sector, as well as the real estate cycle, have far-reaching impacts upon asset quality and profitability at financial institutions.

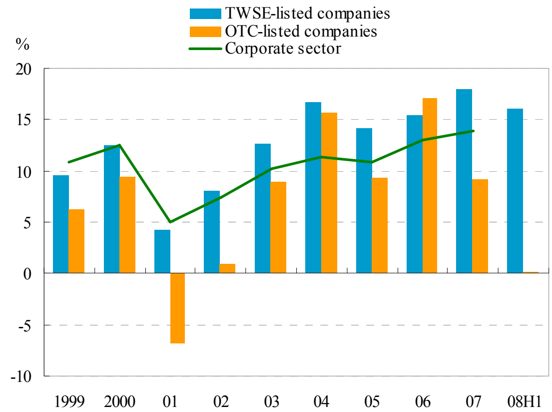
6. Corporate sector

The corporate sector's[61] profitability was strengthened, while its financial structure and solvency continued improving in 2007. The quality of corporate lending also remained satisfactory. In the first half of 2008, however, the impacts of skyrocketing international commodity prices, slowing global economic growth, and increasing operational costs in China could undermine the profitability, financial health, and short-term solvency of both TWSE-listed and OTC-listed companies,[62] which might increase their default risks.

Profitability decreased in the first half of 2008

In line with expanding exports, rebounding domestic demand, and steady growth in the industrial and service sectors in 2007, profitability in the corporate sector kept improving when ROE reached 13.09%. Profitability at TWSE-listed companies sustained an upward trend, while OTC-listed companies slid dramatically due to lower gross profit margins in the electronics sector. In the first half of 2008, the corporate sector faced several challenges arising from

Chart 6.1 Return on equity in corporate sector

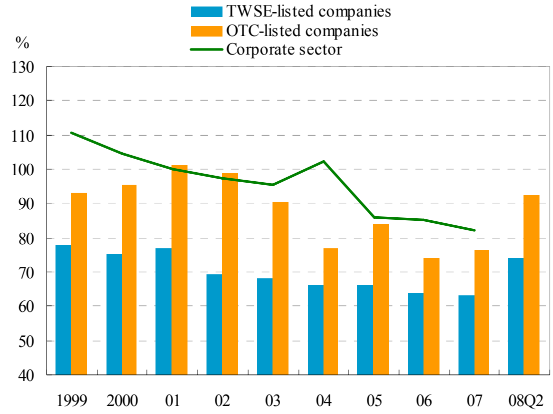


Notes: 1. Return on equity = net income before interest and tax / average equity.
2. Figures for 2008 H1 have been annualized. The ROE of the OTC-listed companies in 2008 H1 was only 0.12%.
Sources: JCIC and TEJ.

[61] The corporate sector data are from the corporate financial report database operated by the Joint Credit Information Center.
[62] The data for TWSE-listed and OTC-listed companies are from the Taiwan Economic Journal co., excluding that for financial and insurance companies and emerging stock-listed companies.

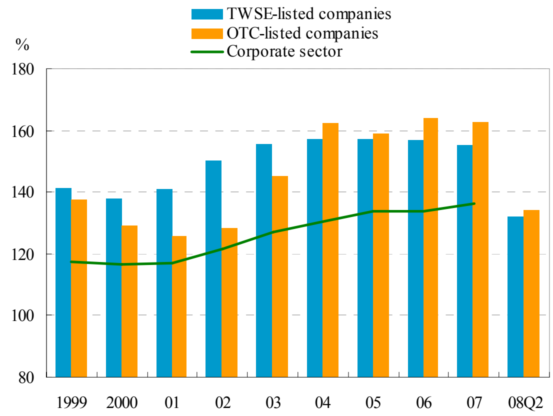
recognition of employee bonuses as expenses, appreciation of the NT dollar, skyrocketing international commodity prices, slowing growth in the global economy, and sluggish consumer demand brought about by inflation. Impacted by those unfavorable factors, the profitability of both TWSE-listed and OTC-listed companies began to shrink. ROE for TWSE-listed companies became declined to 16.01% from 18.03% in 2007, while ROE for OTC-listed companies sharply fell to 0.12% from 9.21% in 2007 due to significant losses suffered by the semiconductor sector (Chart 6.1).

Chart 6.2 Leverage ratio in corporate sector



Note: Leverage ratio = total liabilities / equity.
Sources: JCIC and TEJ.

Chart 6.3 Current ratio in corporate sector



Note: Current ratio = current assets / current liabilities.
Sources: JCIC and TEJ.

Financial structure aggravated

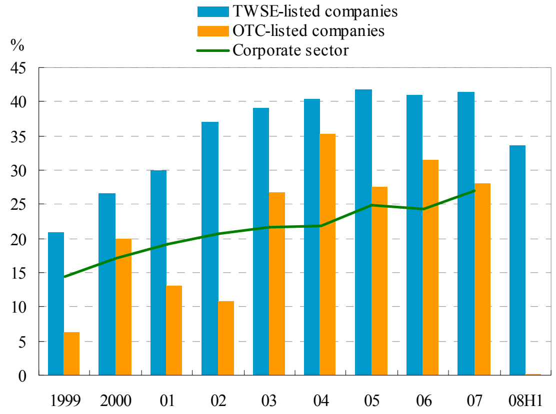
The financial structure of the corporate sector continued to improve as average leverage ratios declined to 82.20% in 2007. The average leverage ratio of TWSE-listed companies was on a downward trend, while that of OTC-listed companies turned to rise owing to an increase in long-term liabilities. The average leverage ratios for both TWSE-listed and OTC-listed companies were lower than the average ratio for the corporate sector as a whole. In the first half of 2008, the financial structures of both TWSE-listed and OTC-listed companies became aggravated. The average leverage ratios for TWSE-listed companies and OTC-listed companies rose dramatically to 74.09% and 92.54%, respectively, as a consequence of a significant increase in short-term liabilities (Chart 6.2).

Short-term debt servicing capacity eroded

Supported by a declining debt level and increasing profitability, the debt servicing capacity for the corporate sector as a whole kept improving in 2007, as the average current ratio climbed to 136.31% and the average cash flow ratio rose to 26.99%. The figures for both TWSE-listed companies and OTC-listed companies were well above those for the corporate sector. In the first half of 2008, the average current ratios for both TWSE-listed and OTC-listed companies began to decline noticeably and stood at 132.15% and 134.08%, respectively, as of the end of June 2008. This was mainly because the sharp rise in oil and commodity prices added the need for working capital, thus raising current liabilities. Even if the average cash flow ratio of TWSE-listed companies declined significantly, their short-term debt servicing capacity remained satisfactory because they still held sufficient cash equivalents as compared to their assets. The average cash flow ratio of OTC-listed companies, however, registered a significant drop to 0.17% on a dramatic decline in profitability. This showed that their debt servicing capacity, with net cash flows from operational activities to cover short-term debts, was weakening and thus called for special attention (Chart 6.3, 6.4).

The average interest coverage ratio for the corporate sector as a whole ascended to 10.78 times in 2007, reflecting continued improvement in the interest covering capacity. The average interest coverage ratio of TWSE-listed companies rose to 19.08 times, well above that of the corporate sector, while that of OTC-listed companies dramatically fell to 7.89 times due to a contraction in profitability, but their interest servicing capacity remained sufficient. In the first half of 2008, the average interest coverage ratio of TWSE-listed companies fell to 17.19 times due to a decline in earnings, while that of OTC-listed companies dropped substantially to 0.08 times because of considerably lower profits in 2007the same period. The short-term debt servicing capacity of OTC-listed companies weakened as earnings may be insufficient to cover interest servicing requirements (Chart 6.5).

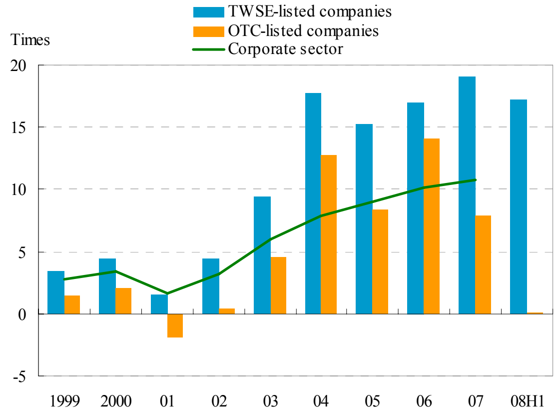
Chart 6.4 Cash flow ratio in corporate sector



Notes: 1. Cash flow ratio = net cash flows from operational activities / current liabilities.
2. Cash flow ratio of OTC-listed companies in 2008 H1 was only 0.17%.

Sources: JCIC and TEJ.

Chart 6.5 Interest coverage ratio in corporate sector



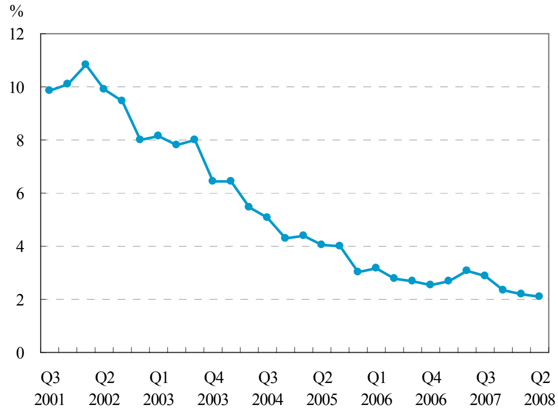
Notes: 1. Interest coverage ratio = income before interest and tax / interest expenses.
2. Interest coverage ratio for OTC-listed companies in 2008 H1 was only 0.08 times.

Sources: JCIC and TEJ.

The credit quality of loans to the corporate sector remained satisfactory, but default risk rose

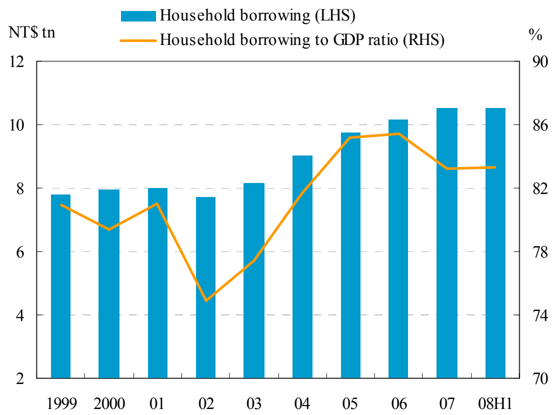
The non-performing ratio of loans to the corporate sector kept falling to 2.11% in June 2008 (Chart 6.6), demonstrating that its credit quality remained satisfactory. Thereafter, however, profitability of the corporate sector might be undermined by several adverse factors, including increasing downside risks to domestic economic growth, declining consumer expenditures due to inflation, and a heavy slump in stock market prices, as well as increasing commodity prices and rising operational costs in China. In addition, affected by the global credit crunch arising from the US subprime crisis, domestic financial institutions became more conservative in extending credit. Enterprises with an unsound financial structure, or SMEs with insufficient transparency in financial reporting might face the pressure of rising financing costs and increasing refinance difficulty, thus increasing their default risk.

Chart 6.6 NPL ratio of corporate loans



Note: End-of-period figures.
Source: JCIC.

Chart 7.1 Household borrowing to GDP



Note: Household borrowing data are end-of-period figures.
Sources: CBC, JCIC and DGBAS.

7. Household sector

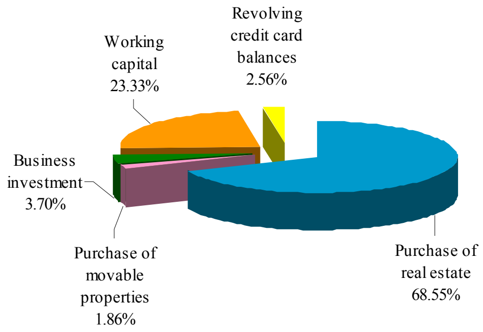
For the household sector, prior to the end of June 2008, borrowing growth moderated and short-term debt servicing capacity strengthened, but debt burdens remained heavy. The credit quality of loans to households continued to be satisfactory. Thereafter, the assets and real income of households might be undermined as the global stock market slumped, domestic economic growth declined, and the unemployment rate rose. Furthermore, debt repayment pressures for borrowers increased as their interest-only periods of high loan-to-value mortgages successively expired. These joint developments could have adverse impacts on the credit quality of loans to households.

Growth in household borrowing decelerated

By the end of June 2008, total household borrowing[63] reached NT$10.55 trillion (Chart 7.1) on year-on-year growth of 1.65%, down from 11% in 2004 and lower than the 3.29% registered at the end of 2007. This was a result of the slowing growth in real estate loans due to the sluggish housing market. The single largest share of household borrowing went for the purchase of real estate (68.55%), followed by working capital loans[64] (23.33%), while revolving balances on credit cards accounted for only 2.56% (Chart 7.2). Compared to the end of 2007, all shares of loans declined, excluding loans for purchasing real estate, which continued to rise.

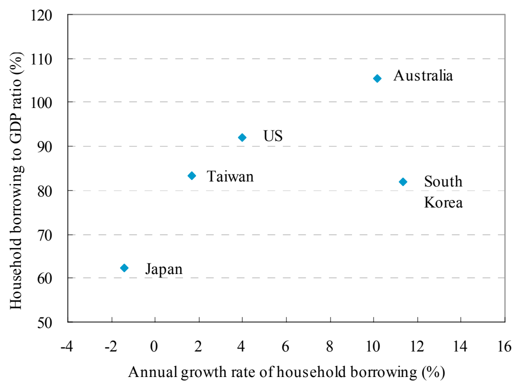
The ratio of household borrowing to GDP was 83.34% as of the end of June 2008, growing slightly by 0.10 percentage point in the first half of the year, mainly due to a much slower pace in GDP growth (Chart 7.1). Compared to other Asian countries, the US, and Australia, total household borrowing in Taiwan grew at a faster annual rate than in Japan, but much slower than in the US, Australia, and South Korea. As a percentage of GDP, household borrowing in Taiwan was lower than in the US and Australia, about the same as in South Korea, but higher than in Japan (Chart 7.3).

Chart 7.2 Household borrowing by purpose



Note: Figures are end-June 2008.
Sources: CBC and JCIC.

Chart 7.3 Household indebtedness in selected countries



Note: Figures are end-June 2008.
Sources: Fed, BEA, BOJ, Cabinet Office of Japan, BOK, ABS, IMF, DGBAS, CBC, and JCIC.

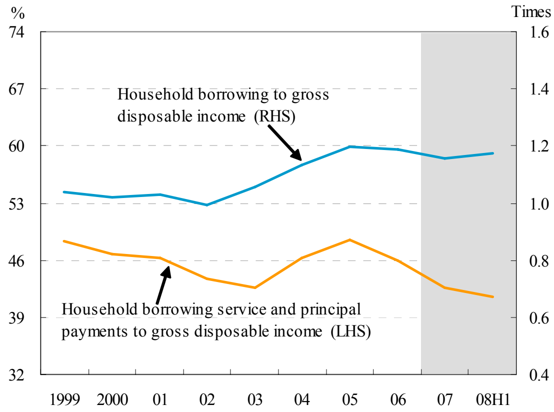
[63] The term "household borrowing" as used in this section refers to outstanding loans and revolving credit card balances taken out by households from the following financial institutions:
(1) Depository institutions: Domestic banks (including medium business banks), local branches of foreign banks, credit cooperatives, credit departments of farmers' associations, credit departments of fishermen's associations, and the Remittances & Savings Department of Chunghwa Post Co.
(2) Other financial institutions: Trust and investment companies, life insurance companies, securities finance companies, and securities firms.

[64] The term "working capital loans" includes outstanding cash card loans.

Household debt burden remained heavy

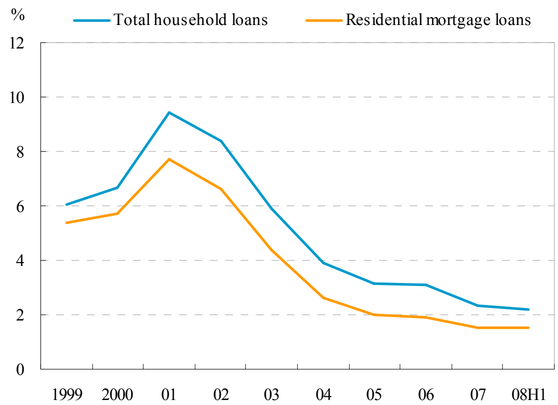
As of the end of June 2008, the ratio of household borrowing to gross disposable income[65] increased to 1.17 times, slightly higher than the 1.16 times seen at the end of 2007, reflecting the continued heavy household debt burden. Nevertheless, the household debt servicing ratio declined to 41.48% from 42.56% in 2007, the lowest since 1999. Although long-term real estate borrowing continued to grow, short-term household borrowing slowed and even contracted, alleviating the pressures from principal and interest payments in the near future. This indicated that household debt servicing capacity continued to improve gradually (Chart 7.4).

Chart 7.4 Household debt servicing ratio



Note: Gross disposable income in shadow area is CBC estimate.
Sources: CBC, JCIC and DGBAS.

Chart 7.5 NPL ratio of household loans



Note: End-of-period figures.
Source: JCIC.

The household NPL ratio[66] continued falling to 2.18% as of the end of June 2008, the lowest in nine years. This came about primarily because the non-performing ratio for residential mortgage loans, accounting for the largest share of loans to households, remained low (Chart 7.5). The credit quality of loans to households remained satisfactory. Thereafter, the slumping global stock market, slowing domestic economic growth, declining real income, and the rising unemployment rate might reduce household assets and real income. In addition, debt repayment pressure for borrowers strengthened as their interest-only periods of high loan-to-value mortgages successively expired. These joint developments may adversely impact the quality of loans to households.

[65] Gross disposable income = disposable income + rental expenses + interest expenses. Gross household disposable income in 2007 and the first half of 2008 were estimated using parameters based on DGBAS data for household disposable income and national disposable income and by carrying out "linear interpolation," which yielded better results through "trend detection" (e.g. performance under various interpolations, such as nearest, linear, spline, pchip, and cubic interpolation).
[66] Household NPL ratio excludes data from the Remittances & Savings Department of Chunghwa Post Co. and all securities firms.

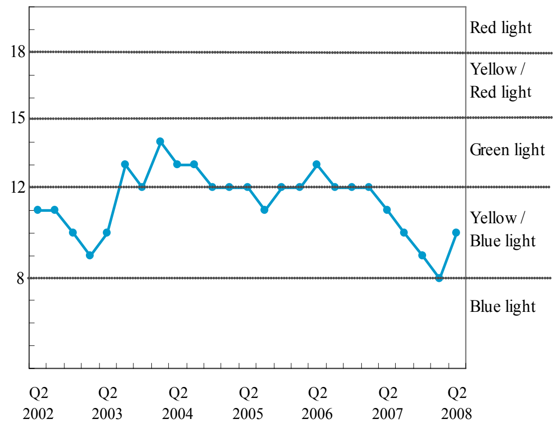
8. Real estate market

Rising prices but falling transaction volumes, coupled with a climbing house vacancy rate and generally tighter lending standards on the part of banks, exerted increasing downward pressure on the real estate market.

Real estate market cooled off

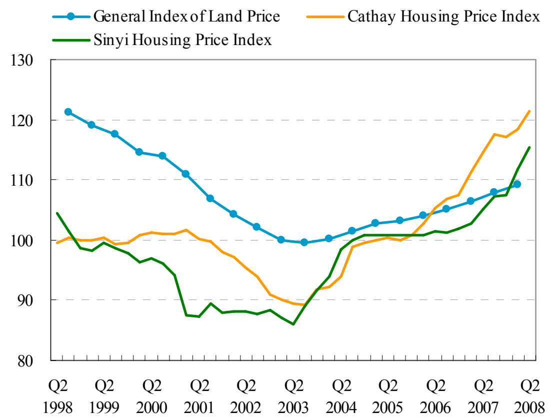
Taiwan's real estate cycle indicator[67] rose slightly in 2008 Q2 but remained under a yellow/blue light,[68] representing a slowdown in the real estate market (Chart 8.1). As for real estate cycle composite indicators, the composite index of leading indicators[69] continued dropping in the first two quarters of 2008, while the composite index of coincident indicators[70] rose sharply in 2008 Q2 but remained lower than the figure in the same quarter of 2007. Most real estate firms, moreover, expected a downturn in the real estate market for the coming two quarters. All these developments indicated that the real estate market turned to cool off.

Chart 8.1 Real estate cycle indicators



Source: "Quarterly Report of Taiwan Real Estate Cycle Indicators," Architecture and Building Research Institute, MOI.

Chart 8.2 Land and house price indices



Note: Land price index is released semiannually (i.e. March and September).
Sources: MOI, Cathay Real Estate, and Sinyi Real Estate.

67 The data of real estate cycle indicators are from "Quarterly Report of Taiwan Real Estate Cycle Indicators," which is issued by the Architecture and Building Research Institute, MOI, and the Taiwan Real Estate Research Center, National Chengchi University, on a quarterly basis.

68 The real estate cycle indicators show five outlooks with different colored lights. A red light indicates a "heated market," a yellow/red light indicates a "moderately heated market," a green light indicates a "stable market," a yellow/blue light indicates a "moderately declining market," and a blue light indicates a "sharply declining market."

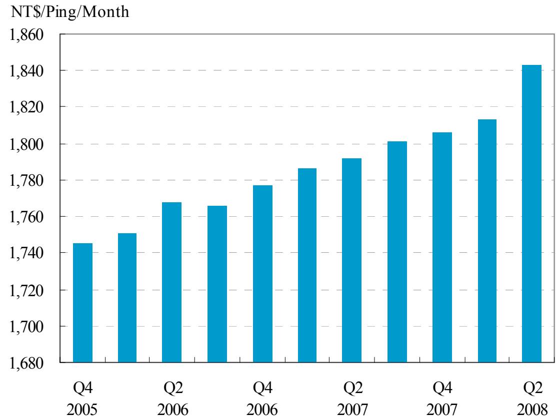
69 The real estate cycle composite indicators comprise six composite indices, i.e. composite indices of leading indicators, coincident indicators, investment indicators, production indicators, trade indicators, and usage indicators. The composite index of leading indicators is made up of the following five components: GDP, money supply, construction sector stock price index, volatility in outstanding construction loans, and consumer price index.

70 The composite index of coincident indicators is made up of the following six components: undeveloped land transaction index, base lending rate, construction permit floor space, standard unit price for new construction projects, new loans for property purchases, and housing occupancy rate.

Real estate prices continued rising even as transaction volumes contracted.

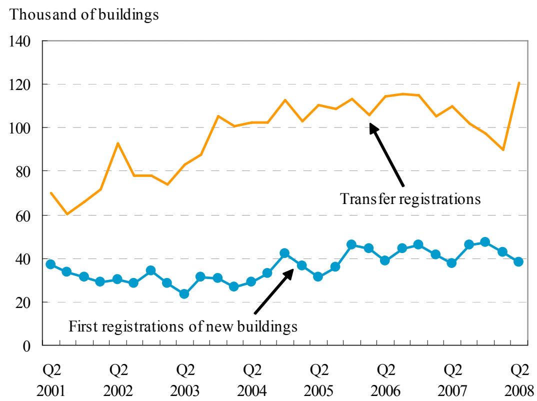
Led by rising construction costs and optimism about cross-strait developments, real estate prices continued to climb in the first half of 2008. The Taiwan Area Land Price Index reached 109.13 in March 2008, increasing by 1.19% from the previous September. The Sinyi House Price Index (for existing buildings) registered 115.39 in 2008 Q2, while the Cathay House Price Index (for new construction) stood at 121.49, increasing by 7.44% and 3.76%, respectively, as compared to the end of the previous year (Chart 8.2). The prices for existing buildings rose at a higher pace, mainly because of the expanding demand for cheaper existing buildings and the comparative effect due to the higher prices for new construction. In step with the appreciation of real estate, rental rates also increased steadily, coupled with office building rentals in Taipei City climbing to NT$1,843 per ping (3.3 square meters) per month in 2008 Q2, up 2.05% from the end of 2007 (Chart 8.3).

Chart 8.3 Average office rental rate in Taipei



Source: Colliers International "Taipei Office Market Overview."

Chart 8.4 Building ownership registrations



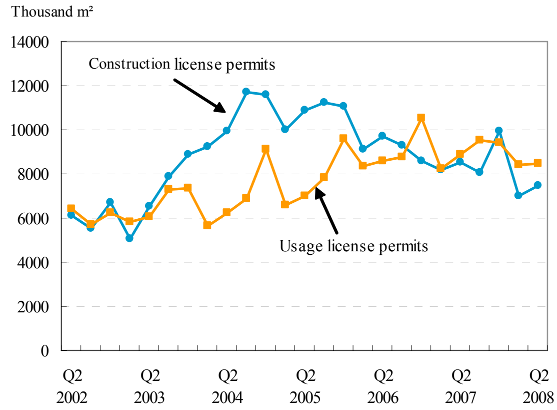
Source: Monthly Bulletin of Interior Statistics, MOI.

With regard to transactions, transfers of building ownership registered 211,000 units in the first half of 2008, dropping by 2.02% year on year (Chart 8.4). During this period, transaction volumes posted a significant decline in the first quarter but then turned to increase rapidly in the second quarter, stimulated by the presidential election and the lifting of limitations on real estate investments from China. Nevertheless, market activities cooled off again from June as Taiwan's stock market began to slump. In addition, first-time ownership registrations decreased quarter by quarter in the first half of 2008, but the total volume remained at 80,000 units, slightly increasing by 1.63% year on year.

New residential property supply expanded, and vacancy rate climbed

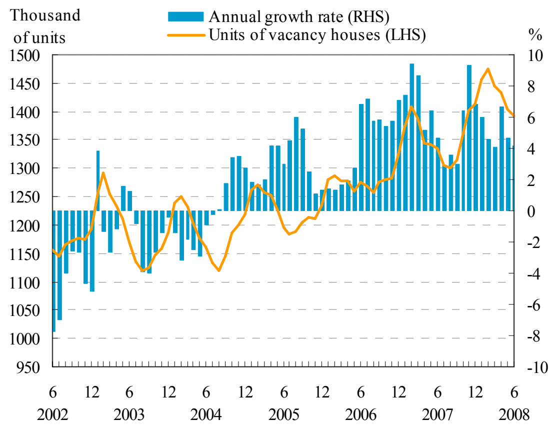
Total floor space, represented by construction license permits, decreased by 13.60% in the first half of 2008, with residential real estate experiencing the biggest drop of 17.06%, showing that builders remained conservative on new construction investment. As to total floor space, represented by usage license permits, the figure decreased by 1.18% year on year (Chart 8.5), mainly due to the contraction by 2.49% for commercial real estate, although residential real estate increased slightly by 0.22%. The total volume of new residential property in the first half of 2008, however, reached 59,000 units, indicating increasing downward pressure on the real estate market as the supply of new residential property continued to expend. In addition, the average number of vacant residential properties[71] continued increasing in the first half of 2008 and reached 1.43 million units, rising by 5.04% year on year (Chart 8.6).

Chart 8.5 Floor space of construction permits and use permits



Source: Monthly Bulletin of Interior Statistics, MOI.

Chart 8.6 Estimated units of vacant houses



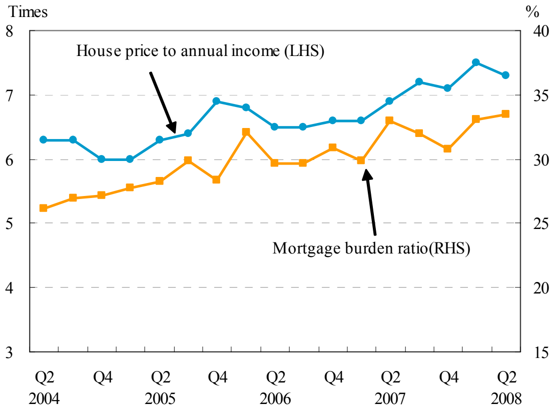
Source: Taiwan Power Company.

[71] Vacant residential properties are estimated by the number of units which consume less power than the minimum service charge from the Taiwan Power Company.

Higher house price to income ratio increased the burden for homebuyers

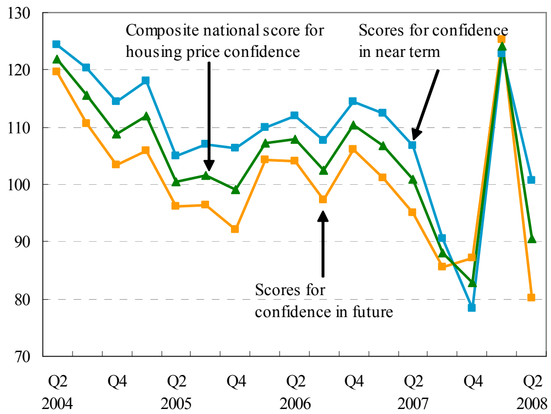
The rising house prices brought a heavier cost burden for homebuyers. The average mortgage burden ratio and the house price to income ratio in 2008 Q2 reached 33.5% and 7.3 times, respectively, both higher than the figures for the same period of the previous year (Chart 8.7). The cost burden was heaviest in Taipei City, where the mortgage burden ratio and the price to income ratio stood at 41.9% and 8.9 times, respectively. Additionally, the composite score for house price confidence[72] rose sharply to reach above 120 points in 2008 Q1, supported by optimism over the presidential election, but then fell back to below 90 points in Q2 as the global stock market slumped and domestic economic performance was worse than expected. This reflected the trend that homebuyers were becoming more conservative about future house price movements (Chart 8.8).

Chart 8.7 House price to income ratio & mortgage burden ratio



Note: Mortgage burden ratio ＝ monthly mortgage expenditure / household monthly income.
Source: "Taiwan Housing Demand Survey Report," Council for Economic Planning and Development.

Chart 8.8 Scores for house price confidence



Source: "Taiwan Housing Demand Survey Report," Council for Economic Planning and Development.

Growth in real estate lending declined significantly, while mortgage interest rates were expected to decline

The outstanding real estate-related loans granted by banks[73] continued to grow in the first half of 2008, but at a much slower pace. In June, year-on-year growth in loans for house-purchases and house-refurbishments declined to 4.47%, and construction loans dropped dramatically to 8.91% (Chart 8.9), mainly due to a more cautious lending stance for real estate loans by banks

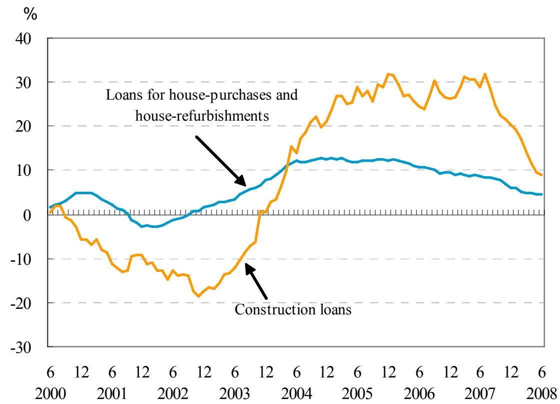
[72] The house price confidence scores, released by the Council for Economic Planning and Development, range from 0 to 200. A score of 100 indicates that the number of people expecting prices to rise is equal to the number of those expecting the opposite, while a score above 100 indicates that more people expect prices to rise, and vice-versa. Scores for confidence in near-term and future prices refer to expectations for prices three months and one year in the future, respectively.

[73] The term "bank" in this section includes domestic banks (including medium business banks) and the local branches of foreign banks.

and a shrinking loan-to-value ratio for housing loans. In 2008 Q2, the housing market turned to warm up after the presidential election, while the monthly total of new mortgage loans granted by Taiwan's top five banks[74] increased markedly and reached NT$49.9 billion in June. Mortgage interest rates rose steadily, reflecting the CBC's rate hiked and reached 2.80% in June 2008. Nevertheless, they were expected to decline in the near future as the CBC began to cut interest rates from September 2008 (Chart 8.10).

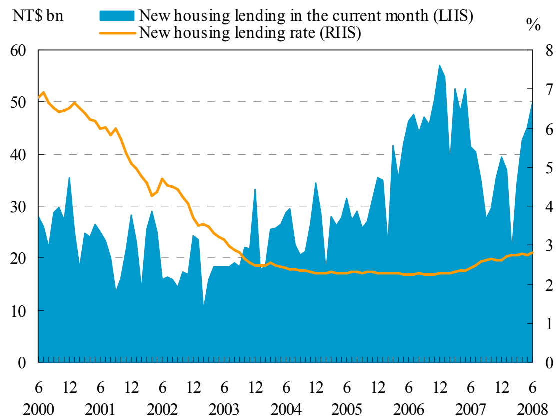
The asset quality of real estate-related loans in domestic banks remained satisfactory, with their average NPL ratio remaining low at 1.43% as of June 2008. Even though banks adopted stricter lending standards for real estate-related loans, the default risk in these loans might have increased, as a result of a heavier debt repayment pressure for borrowers caused by the cooling real estate market, expiring interest-only periods of high loan-to-value mortgages, the rising unemployment rate, and slowing domestic economic growth.

Chart 8.9 Annual growth in housing and construction loans



Source: CBC.

Chart 8.10 New mortgage loans – amount & interest rate



Source: CBC.

[74] The "top five" banks refer to the Bank of Taiwan, Taiwan Cooperative Bank, First Commercial Bank of Taiwan, Hua Nan Commercial Bank, and Chang Hwa Commercial Bank.