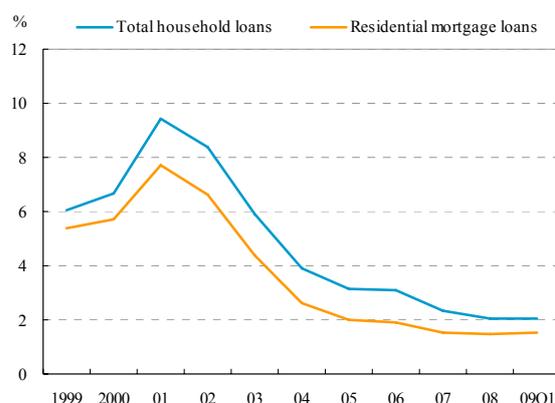


ratios for total household borrowing and for residential mortgage loans increased slightly (Chart 4.14). Nevertheless, the sluggish domestic economy, declining real incomes and an increasing unemployment rate may have adverse impacts on household debt servicing capacity and thus increase the credit risk faced by banks.

### 4.3 Real estate market

The real estate market cooled off as transaction volumes plunged dramatically. Amid signs that prices would decline, housing prices remained resilient due to historically low interest rates and a series of stimulus measures adopted by the government to underpin the real estate market. These stimulus measures included extending the expiration of construction license permits, offering additional preferential mortgage loans for homebuyers as well as opening the local real estate market to investors from China. Nevertheless, under the consideration of the rising unemployment rate and shrinking household wealth caused by the economic slump, together with expanding supply in the housing market, downward pressure still existed. Banks should pay attention to the credit risk of real estate-related loans.

**Chart 4.14 NPL ratio of household borrowing**



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

**Chart 4.15 Real estate cycle indicators**



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

### **Real estate market cooled off as downward pressure on housing prices remained**

Taiwan's real estate cycle indicators<sup>30</sup> remained under a blue light in 2008 Q4, the same as

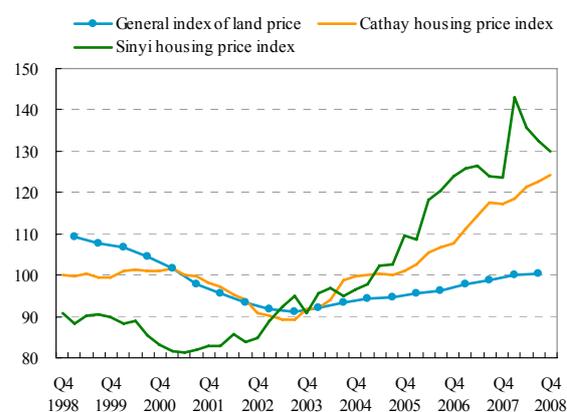
<sup>30</sup> The real estate cycle indicators show five outlooks with different colored lights. A red light indicates a "heated market," a yellow/red light indicates a "moderately heated market," a green light indicates a "stable market," a yellow/blue light indicates a "moderately declining market," and a blue light indicates a "sluggish market."

the previous quarter (Chart 4.15). The composite index of leading indicators<sup>31</sup> in Q4 also dropped dramatically by 1.96% quarter on quarter. This indicated that Taiwan's real estate market appeared to be cooling and that the downward pressure on housing prices still existed.

**Real estate prices remained high but signs of softness emerged as transaction volumes contracted**

In general, real estate prices remained high in 2008 Q4, but a declining trend emerged in some areas. Taiwan's land prices remained stable as the general index of land price reached 100.51 in September 2008, increasing by 1.61% year on year, and registered a historical high since 2001. The Cathay housing price index (for new housing construction) stood at 124.24 in 2008 Q4, though with a smaller growth rate of 6.10% year on year. The Sinyi housing price index (for existing building sales) continued falling after 2008 Q1 but still registered a high of 129.87 in Q4 with an annual growth rate of 5.05%, showing that prices for existing buildings remained high (Chart 4.16). Average office rental rates in Taipei saw a slight slowdown and registered NT\$1,839 per ping (3.3 square meters) per month in 2008 Q4, dropping by 0.7% from the previous quarter, but still increased by 1.83% year on year (Chart 4.17). In 2009 Q1, the Cathay housing price index decreased by 1.65% quarter on quarter, and the Sinyi housing price index kept declining to 127.25 as the office rental rate in Taipei fell to NT\$1,799 per ping per month. These falling indices reflected signs of a decline in real estate prices.

**Chart 4.16 Land and house price indices**



Note: General index of land price is released semiannually (i.e. March and September).

Sources: MOI, Cathay Real Estate, and Sinyi Real Estate Inc.

**Chart 4.17 Average office rental rate in Taipei**

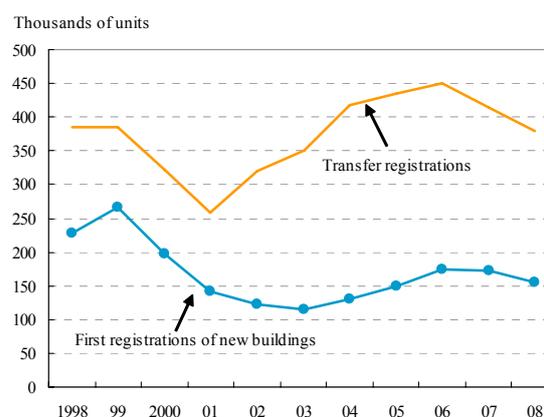


Source: Colliers International "Taipei Office Market Overview."

<sup>31</sup> 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.

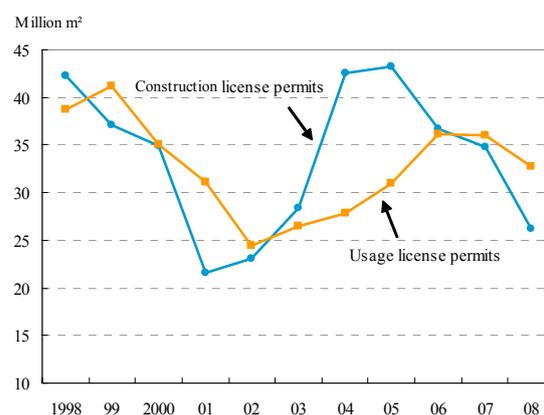
As for transactions in the real estate market, influenced by domestic economic sluggishness and stricter lending standards for housing loans, investors tended to be more conservative, causing real estate transaction volume to contract significantly in the second half of 2008. The number of building ownership transfers descended by 8.52% year on year and registered 379 thousand units in 2008, the lowest figure since 2004. Similarly, the number of first-time ownership registrations decreased by 10.55% year on year and reported 154 thousand units in 2008, indicating that real estate transactions contracted significantly (Chart 4.18). After March 2009, supported by low interest rates, falling housing prices, a bullish domestic stock market, additional preferential mortgage loans for homebuyers and opening of the local real estate market to investors from China, the market for existing buildings warmed up. Nevertheless, the transaction volume was much lower than that of the same period in the previous year.

**Chart 4.18 Building ownership registrations**



Source: Monthly Bulletin of Interior Statistics, MOI.

**Chart 4.19 Floor space of construction license permits and usage license permits**



Source: Monthly Bulletin of Interior Statistics, MOI.

### ***New construction shrank greatly but the supply of new residential property remained abundant***

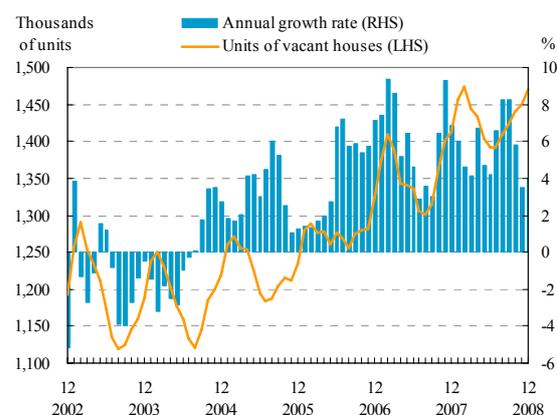
Owing to the sluggish domestic economy and weakening demand in the real estate market, construction companies became more conservative regarding new construction investments. The total floor space of construction license permits in 2008 descended by 24.7% year on year. The substantial shrinkage appeared both in residential and commercial construction. As for the supply of new properties, total floor space of usage permits in 2008 contracted by 9.20% year on year (Chart 4.19), mainly resulting from a decline of 14.70% in new residential properties. However, the supply of new residential properties remained ample and registered 111 thousand units in 2008, despite a 14.86% year on year decline. In addition, the

average number of vacant residential properties was about 1,432 thousand units, increasing by 5.52% year on year (Chart 4.20). From January to March 2009, the average number of vacant residential properties climbed further by 4.50% compared to 2008 and registered a historical high.

***Mortgage burden alleviated slightly but public confidence in housing prices fell significantly***

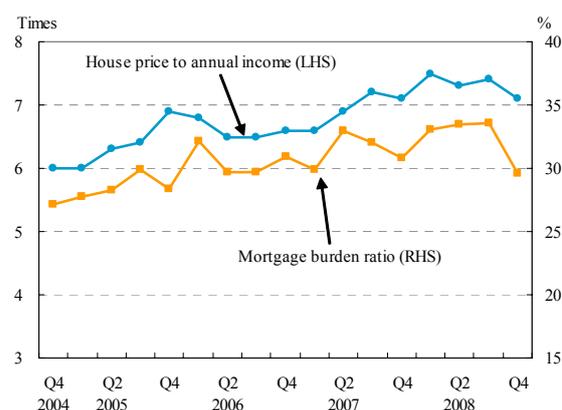
The cost burden for homebuyers alleviated slightly as the average mortgage burden ratio dropped to 29.6% in 2008 Q4, lower than the figures in the previous quarter and in 2007 Q4. However, the house price to income ratio remained high and reached 7.1 in 2008 Q4, the same as that in 2007 Q4, though lower than that in the previous quarter (Chart 4.21). Regarding public confidence in house prices, the composite score dropped significantly from 2008 Q2 and reported a score of 50 points<sup>32</sup> in Q4 (Chart 4.22). This reflected homebuyers' pessimism about future house price movements.

**Chart 4.20 Estimated units of vacant houses**



Source: Taiwan Power Company.

**Chart 4.21 House price to income ratio & mortgage burden ratio**



Note: Mortgage burden ratio = monthly mortgage expenditure/household monthly income.

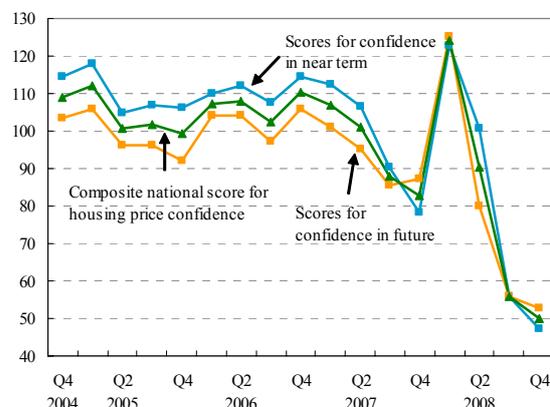
Source: "Taiwan Housing Demand Survey Report," MOI.

<sup>32</sup> 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 within the next three months and one year in the future, respectively.

### Real estate-related loans grew slowly while mortgage interest rates declined

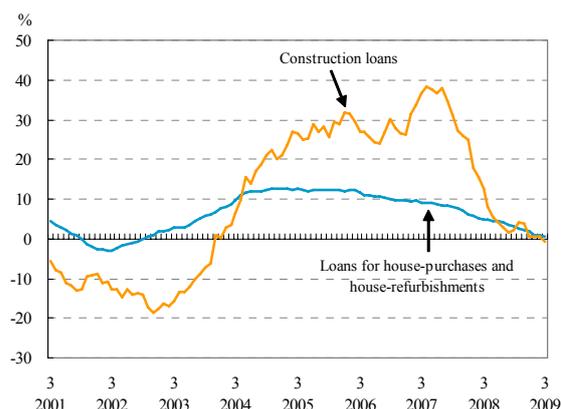
Real estate-related loans granted by banks<sup>33</sup> grew at a slower pace in the second half of 2008 owing to declining demand for house-purchases and house-refurbishments, as well as conservative mortgage practices in the banking industry. The annual growth rate of loans for house-purchases and house-refurbishments dropped to 1.47% in December 2008 and further declined to 0.99% in March 2009, while the annual growth rate of construction loans plunged more dramatically to 0.67% in December 2008 and -0.64% in March 2009 (Chart 4.23). Growth in new mortgage loans granted per month by the five largest banks turned negative from July 2008 but rebounded significantly in December, stimulated by an additional NT\$ 200 billion-worth of preferential mortgage loans provided by the government, before declining moderately in March 2009. The mortgage interest rate rose gradually from 2008 Q1 and reached a peak of 2.859% in September. However, it dropped back to 2.523% in December and further declined to 1.850% in March 2009 as banks lowered the mortgage interest rate in line with a succession of the CBC's rate cuts, displaying the effectiveness of the CBC's monetary easing in affecting banks' mortgage rates (Chart 4.24).

Chart 4.22 Scores for house price confidence



Source: "Taiwan Housing Demand Survey Report," MOI.

Chart 4.23 Annual growth rate of real estate-related loans

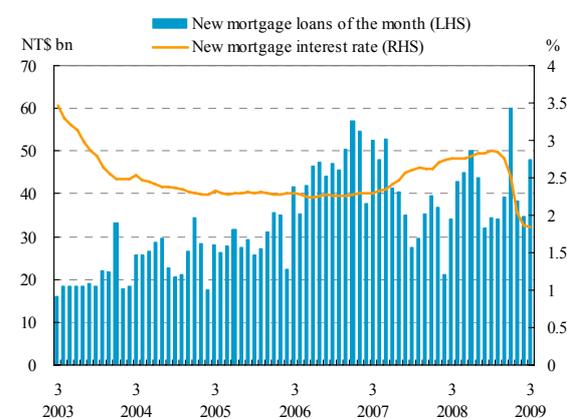


Source: CBC.

<sup>33</sup> The term "bank" here refers to domestic banks and the local branches of foreign banks.

Although the NPL ratio of loans for real estate purchases registered 1.44% in 2008 Q4 and further increased to 1.51% in 2009 Q1, the asset quality of those loans remained satisfactory. This increasing trend warrants closer attention, however, as the ratio has been increasing for five consecutive months. The housing market was expected to be underpinned by historically low mortgage interest rates and a series of measures adopted by the government, including implementing the economic stimulus package, extending the expiration of construction license permits, offering additional preferential mortgage loans for homebuyers as well as opening the local real estate market to investors from China. Nevertheless, given the rising unemployment rate and shrinking household wealth caused by the economic slump, together with expanding supply in the real estate market, downward pressure still existed. Banks should pay attention to the credit risk of real estate-related loans.

**Chart 4.24 New mortgage loans – amount & interest rate**



Source: CBC.